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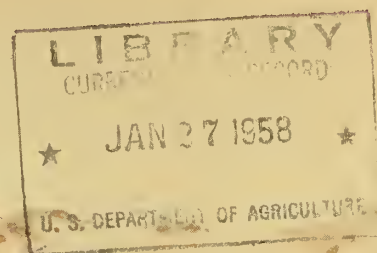








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FEDERAL - STATE - PRIVATE COOPERATIVE  
SNOW SURVEY and WATER SUPPLY FORECASTS  
for  
OREGON

UNITED STATES DEPARTMENT of AGRICULTURE  
SOIL CONSERVATION SERVICE  
and  
OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above  
in cooperation with other Federal, State and private organizations.

AS OF  
JAN. 1, 1958

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

## PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
<b>RIVER BASINS</b>			
COLORADO, RIO GRANDE ..... AND PLATTE-ARKANSAS	MONTHLY (FEB.-MAY)	COLD. EXP. STATION	FT. COLLINS, COLO.
COLUMBIA <i>Includes Alaska</i> .....	MONTHLY (JAN.-MAY)		BOISE, IDAHO
UPPER MISSOURI .....	MONTHLY (FEB.-MAY)	MONT.AGR.EXP.STATION	BOZEMAN, MONTANA
WEST-WIDE .....	SEMI-ANNUALLY (OCT. 1 AND APR.1)	COOPERATORS	PORTLAND, OREGON
<b>STATES</b>			
ARIZONA .....	SEMI-MONTHLY (JAN. 15-APR.1)	SALT R. VALLEY WATER USERS ASSOCIATION	PHDENIX, ARIZONA
NEVADA .....	MONTHLY (FEB.-APR.)	NEVADA STATE ENGINEER	RENO, NEVADA
OREGON .....	MONTHLY (JAN.-MAY)	ORE.AGR.EXP.STATION	PORTLAND, OREGON
UTAH .....	MONTHLY (JAN.-MAY)	UTAH STATE ENGINEER UTAH AGR.EXP.STATION	SALT LAKE CITY, UTAH
WASHINGTON .....	MONTHLY (FEB.-MAY)	WASH. STATE DEPT. OF CONSERVATION AND DEVELOPMENT	SPOKANE, WASHINGTON
WYOMING .....	MONTHLY (FEB.-JUNE)	WYOMING STATE ENGINEER	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section  
Soil Conservation Service  
209 S.W. 5th Avenue, Portland 4, Oregon

## PUBLISHED BY OTHER AGENCIES

### OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA .....	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA .....	MONTHLY (FEB.-MAY)	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

234600

FEDERAL - STATE - PRIVATE COOPERATIVE  
SNOW SURVEY and WATER SUPPLY FORECASTS  
for  
OREGON

ISSUED

JANUARY 8, 1958

*Report prepared by*

W. T. FROST, Snow Survey Supervisor

*and*

MANES BARTON, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE  
209 S.W. 5TH AVE. PORTLAND 4, OREGON

*Issued by*

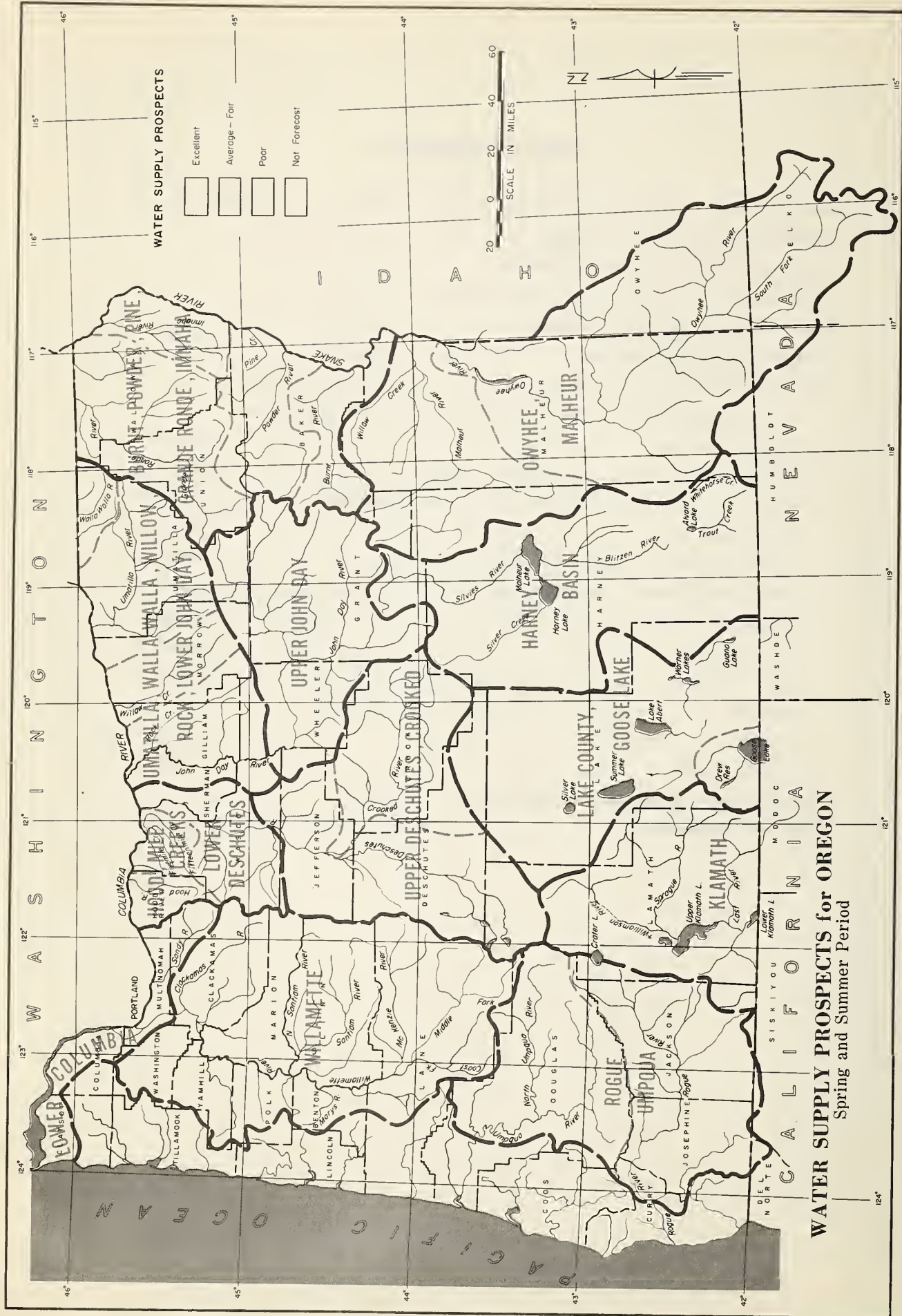
THOMAS P. HELSETH  
STATE CONSERVATIONIST  
SOIL CONSERVATION SERVICE

F. EARL PRICE  
DIRECTOR  
OREGON AGRICULTURAL  
EXPERIMENT STATION



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# WATER SUPPLY OUTLOOK for OREGON

JANUARY 1, 1958

Outlook for Oregon's 1958 water supplies is satisfactory with a 120 percent normal snow-cover now present in the mountain watersheds. Reservoired water supplies are mostly well above average.

## SNOW-COVER:

Water content of mountain snow in Oregon averages 120 percent normal compared with only 56 percent normal at this date last year. The snow is fairly well distributed at both high and low elevations.

Normally, about 39 percent of the total winter's snow is accumulated by January 1. This year we already have received 47 percent of the normal accumulation.

## SOIL-MOISTURE:

The amount of water present in the soil mantle of mountain watersheds varies from fair in the Owyhee-Malheur areas to exceptionally good in the Burnt-Powder-Grande Ronde-Imnaha areas. In most areas the soils are relatively well wetted.

## RESERVOIRED WATER:

Stored water in 18 important Oregon reservoirs is now 124 percent of the average and 107 percent of last year. Oniy Agency Valley, Unity, and McKay reservoirs are below average in storage.

## PRECIPITATION:

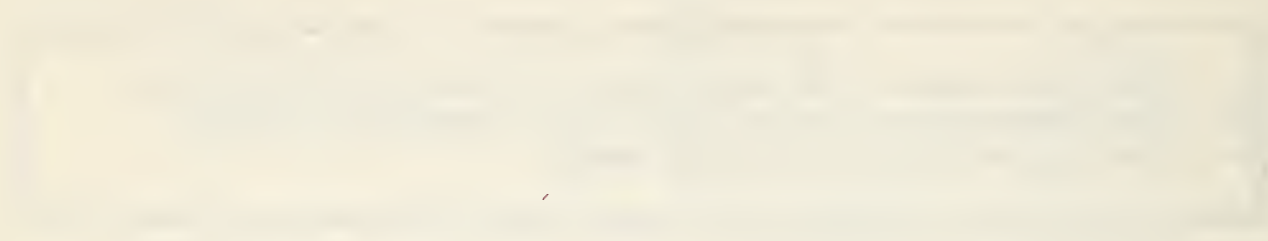
State-wide precipitation<sup>1</sup> averages 100 percent normal at 13 valley stations for the October through December period. December was 138 percent normal at these stations.

## STREAMFLOW:

Present outlook for April-September streamflow averages about normal in the state. Flow<sup>2</sup> of key Oregon streams during the period October through December has been nearly normal except on the Owyhee which has been 84 percent normal and the inflow to Upper Klamath Lake which has been 153 percent normal.

<sup>1</sup>From preliminary data furnished by U.S. Weather Bureau, Portland, Oregon.

<sup>2</sup>From preliminary data furnished by U.S. Geological Survey, Portland, Oregon.

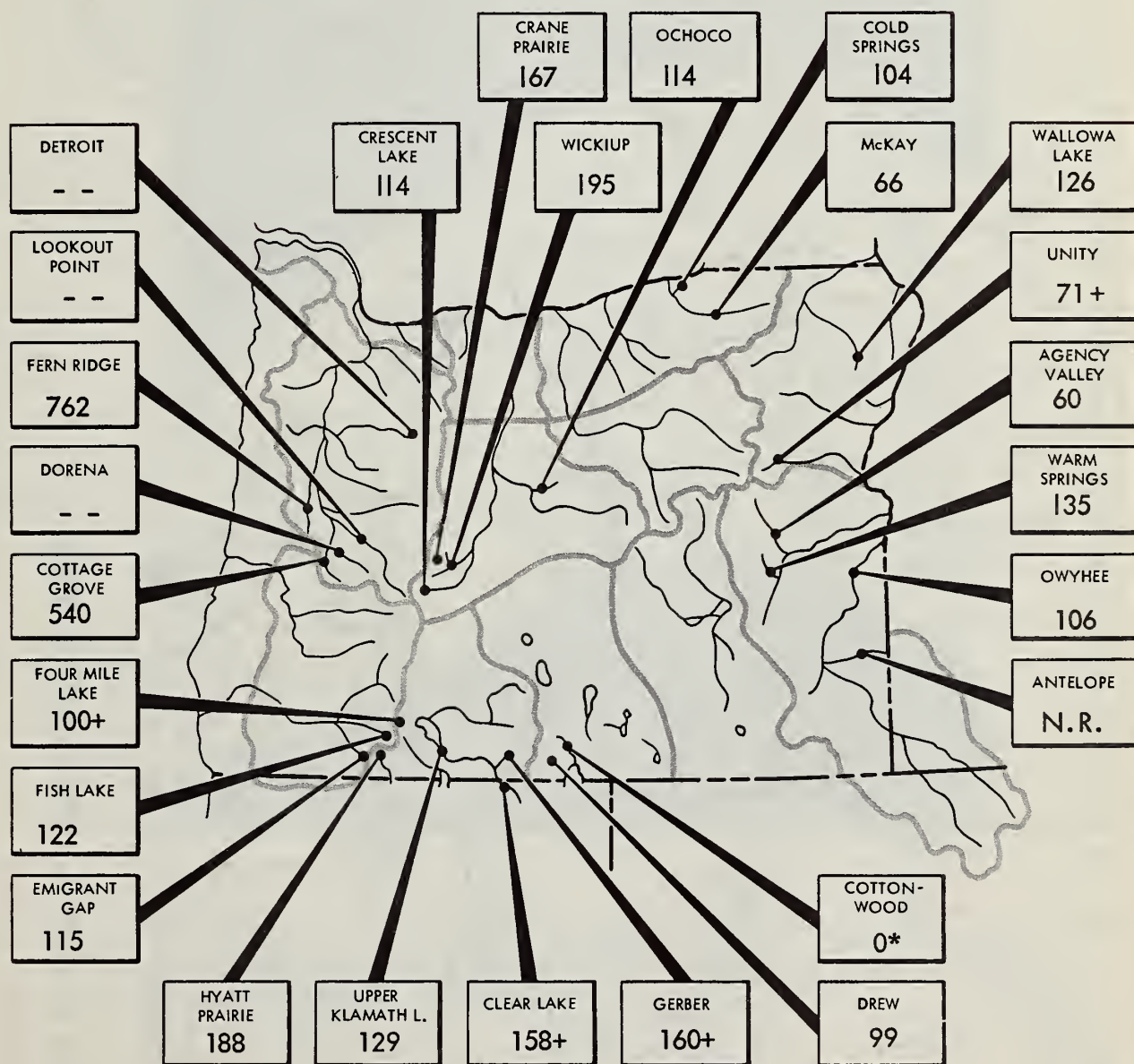


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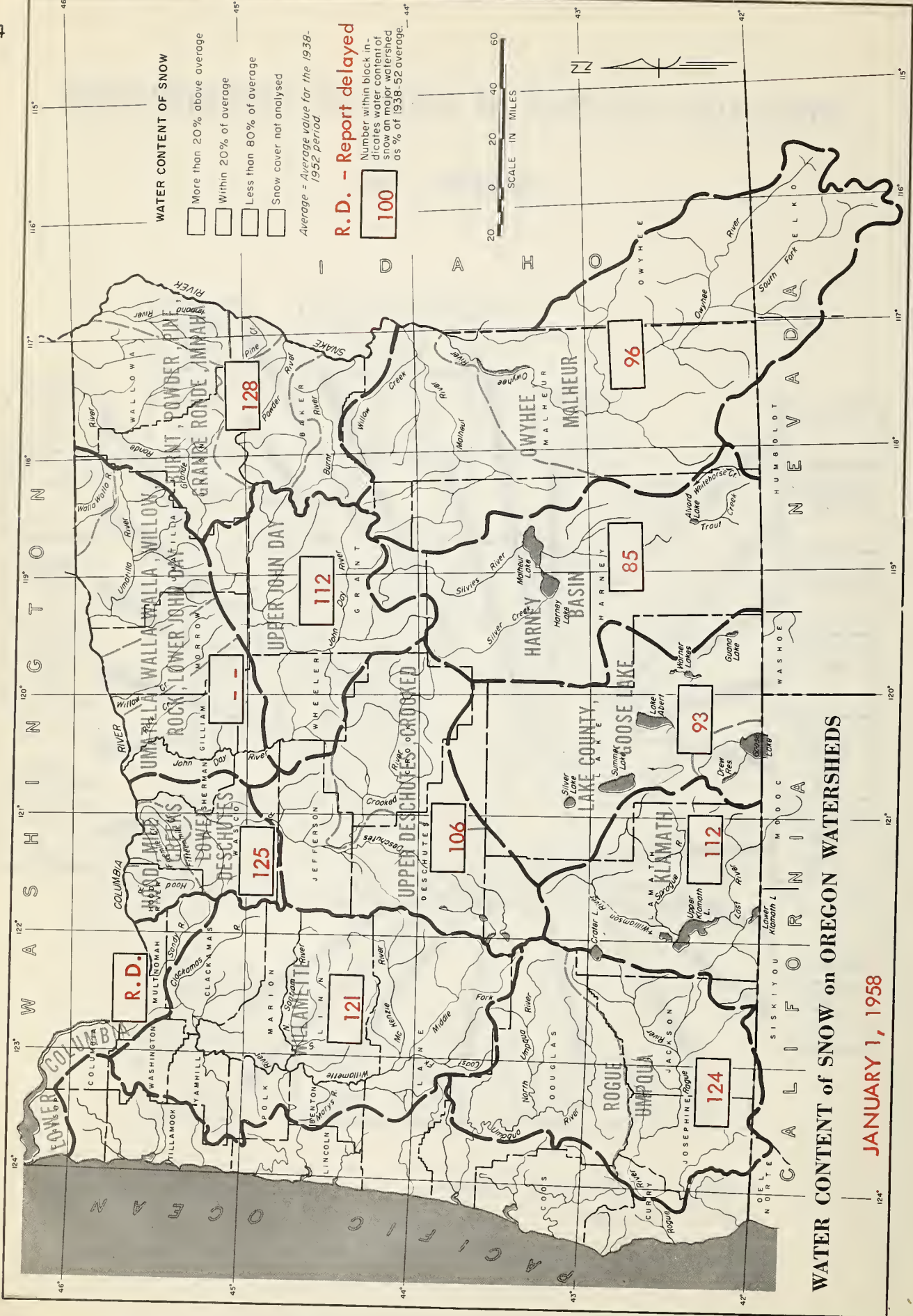
ORIGINAL ARTICLES	1
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# STORAGE STATUS of OREGON RESERVOIRS

JANUARY 1, 1958

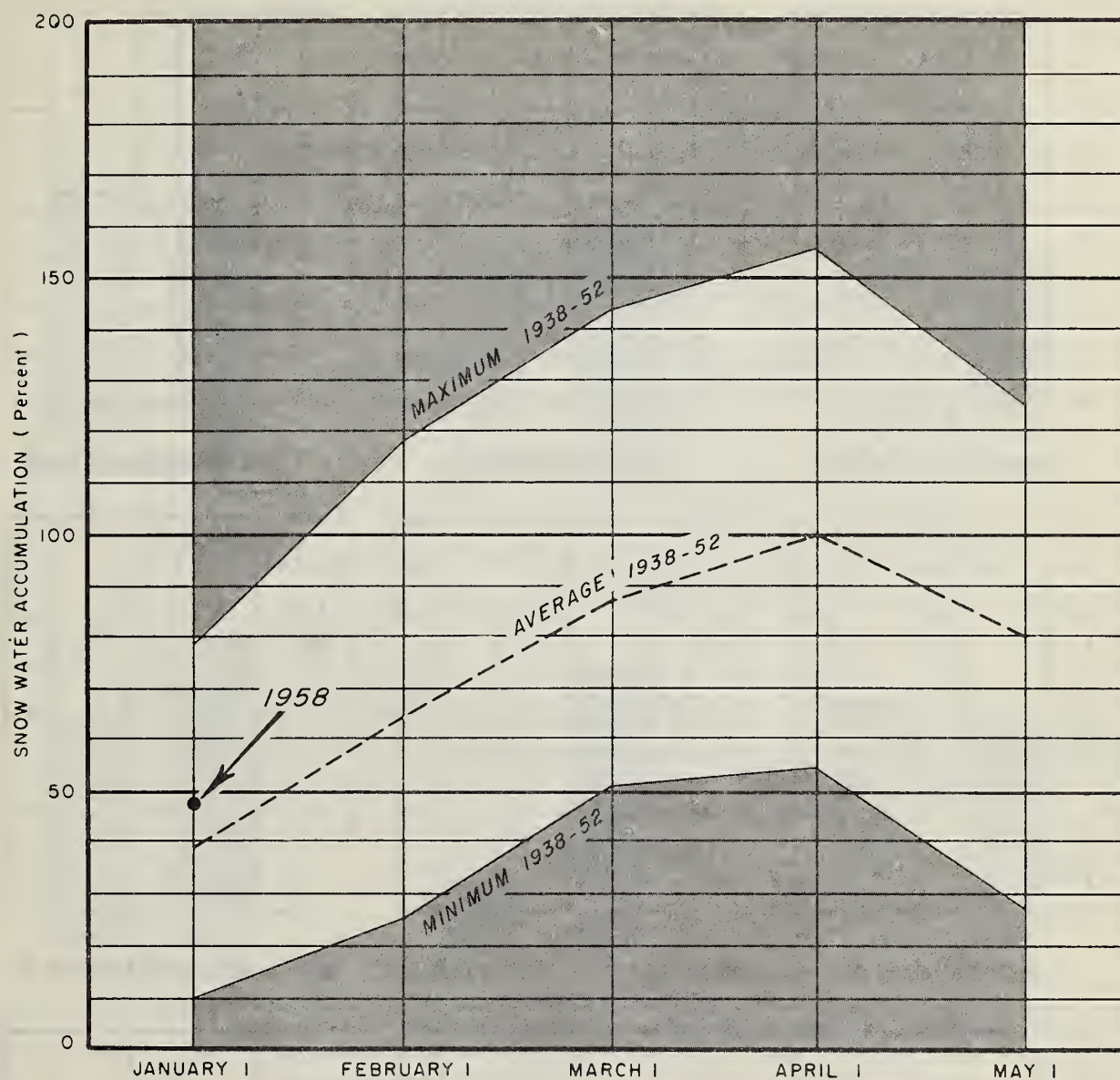


\* Empty - As is usual for this date  
N.R. - No report



## SNOW WATER ACCUMULATION in OREGON

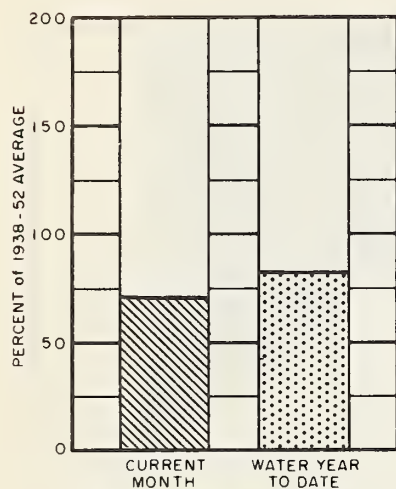
JANUARY 1, 1958



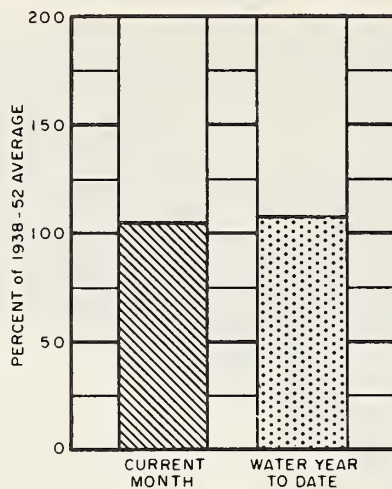
Nearly half of the normal accumulation of snow water has occurred to date. Usually there is about 40 percent on the ground by January 1 but this year we have 47 percent.

# CURRENT OREGON STREAMFLOW

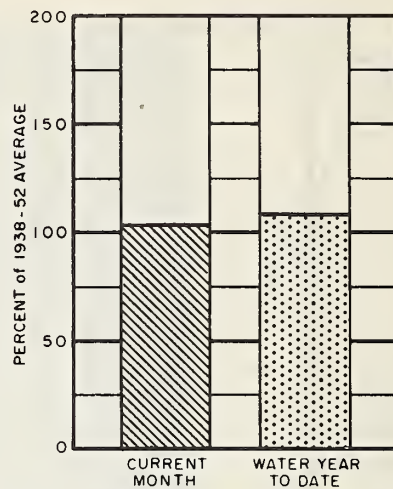
JANUARY 1, 1958



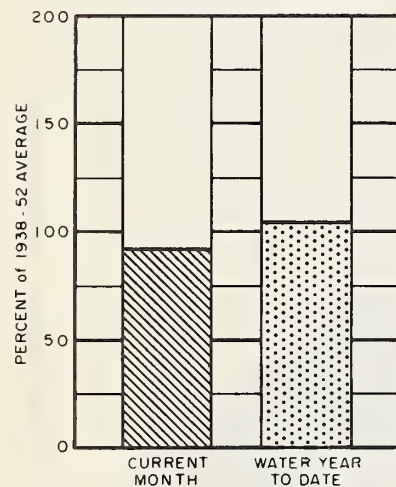
Owyhee Res. net inflow



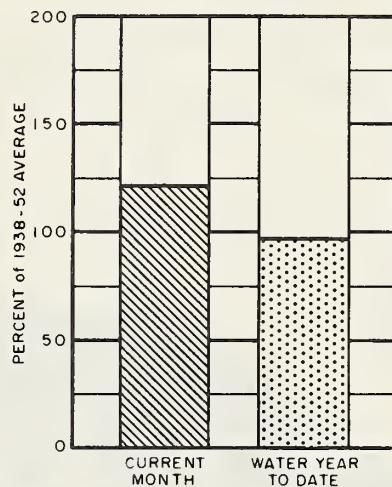
Umatilla near Umatilla



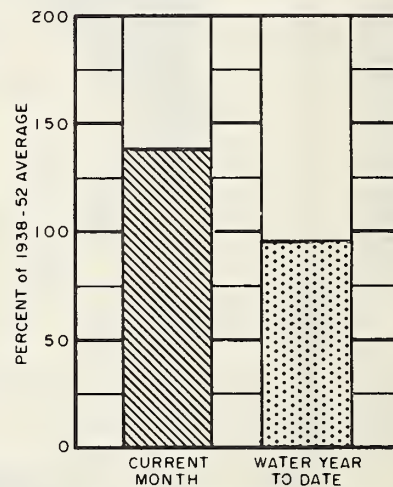
John Day at Service Creek



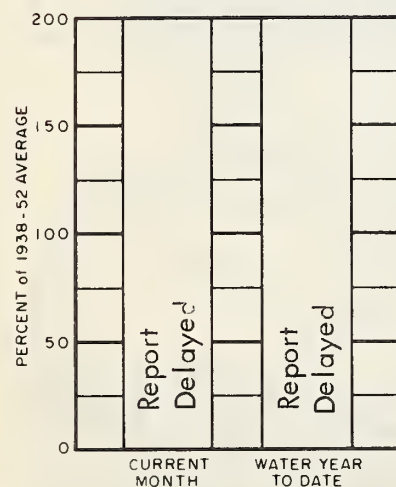
Deschutes at Moody



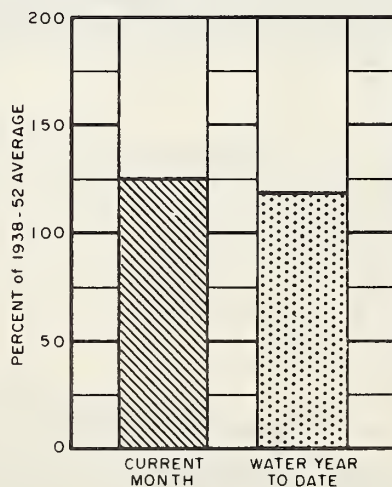
Hood and conduit near Hood River



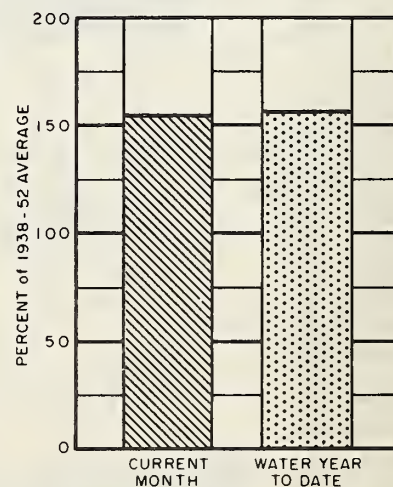
Mid. Fk. Willamette below No. Fk.



Umpqua near Elkton



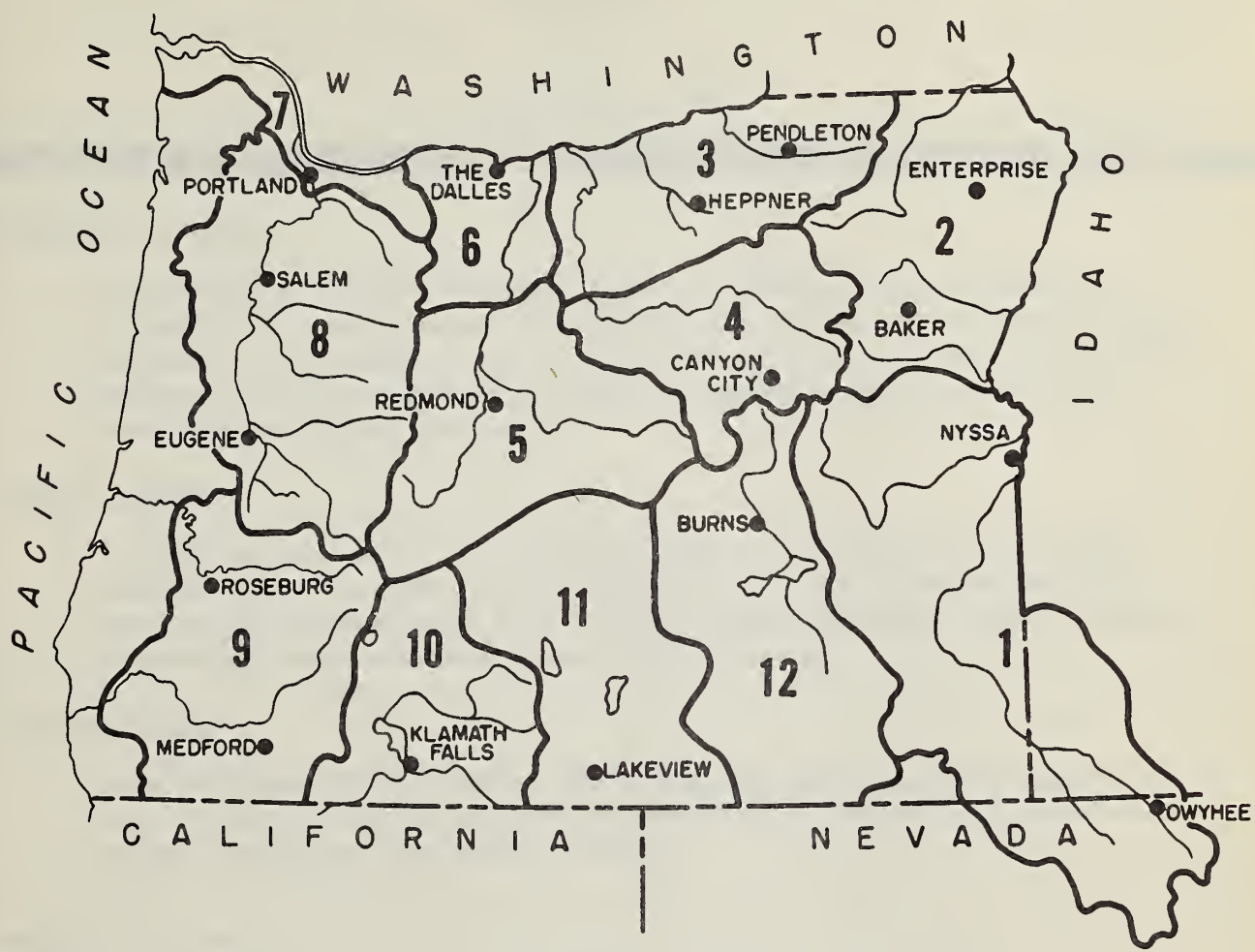
Rogue at Raygold



Upper Klamath Lake net inflow

# VALLEY PRECIPITATION in OREGON<sup>a</sup>

January 1, 1958



PRECIPITATION as PERCENT of the 1938-52 AVERAGE

STATION	CURRENT MONTH	WATER YEAR TO DATE <sup>b</sup>	STATION	CURRENT MONTH	WATER YEAR TO DATE <sup>b</sup>
Baker Apt.	167	180	Owyhee (Nev.)	Report	delayed
Burns	95	107	Pendleton Apt.	122	103
Canyon City	Station	closed	Portland Apt.	89	71
Enterprise	Report	delayed	Redmond Apt. *	139	94
Eugene Apt.	215	112	Roseburg Apt.	164	109
Heppner	Report	delayed	Salem Apt.	127	85
Klamath Falls Apt.	194	186	The Dalles	134	97
Lakeview	86	103			
Medford Apt.	111	87			
Nyssa	135	91			

<sup>a</sup>Preliminary data furnished by the U.S. Weather Bureau. <sup>b</sup>Oct. 1 to date. <sup>c</sup>Report delayed.

\*As percent of Redmond average



# WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

*as of*

JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Irrigation water supplies for Malheur County in 1958 should be satisfactory if indications of present snow surveys, soil-moisture stations, and reservoir records are correct. It is still too early to reach a firm conclusion on next summer's water supplies since this region depends greatly on reservoired water, which is very sensitive to mid-winter snow-melt.

## SNOW-COVER

Although the snow-cover is very near to normal, it is about three times greater than last year at this date. Low elevation snow is a little below normal on the Malheur and somewhat above normal on the Owyhee watershed. Reports indicate an excellent snow-pack above Jordan Valley this year.

## SOIL-MOISTURE

Some fairly good fall rains were scattered over the area before snow began to stay. In spite of this, the soil-moisture conditions are only fair with penetration limited to about one foot in most locations.

## RESERVOIR STORAGE

Reports from three major reservoirs of the area indicate storage totalling a little less than last year but about 107 percent of average. Agency Valley Reservoir is the only one reporting below average. See table on inside page for detailed storage reports.

## STREAMFLOW

Flow of the Owyhee River was about average in October but fell below normal in November and was about 71 percent normal in December. Smaller streams have been having greatly reduced flows or have dried up.

Report prepared by

W T Frost and Manes Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

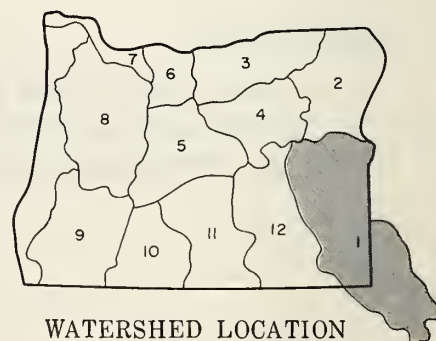
STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Boulder Creek Bully Creek Cow Creek Jordan Creek Jordan Valley I.D. McDermitt Creek Oregon Canyon Creek Owyhee Project Sucker Creek Ten Mile Creek Vale, Oregon I.D. Warm Springs I.D. Willow Creek	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
1320	Malheur near Drewsey	d	April-Sept.	82	
139	Malheur North Fork at Beulah <sup>e</sup>	d	April-Sept.	64	
1234	Owyhee Reservoir net Inflow <sup>g</sup>	d	April-Sept.	458	
		d	April-July	440	
		d	March-July	570	

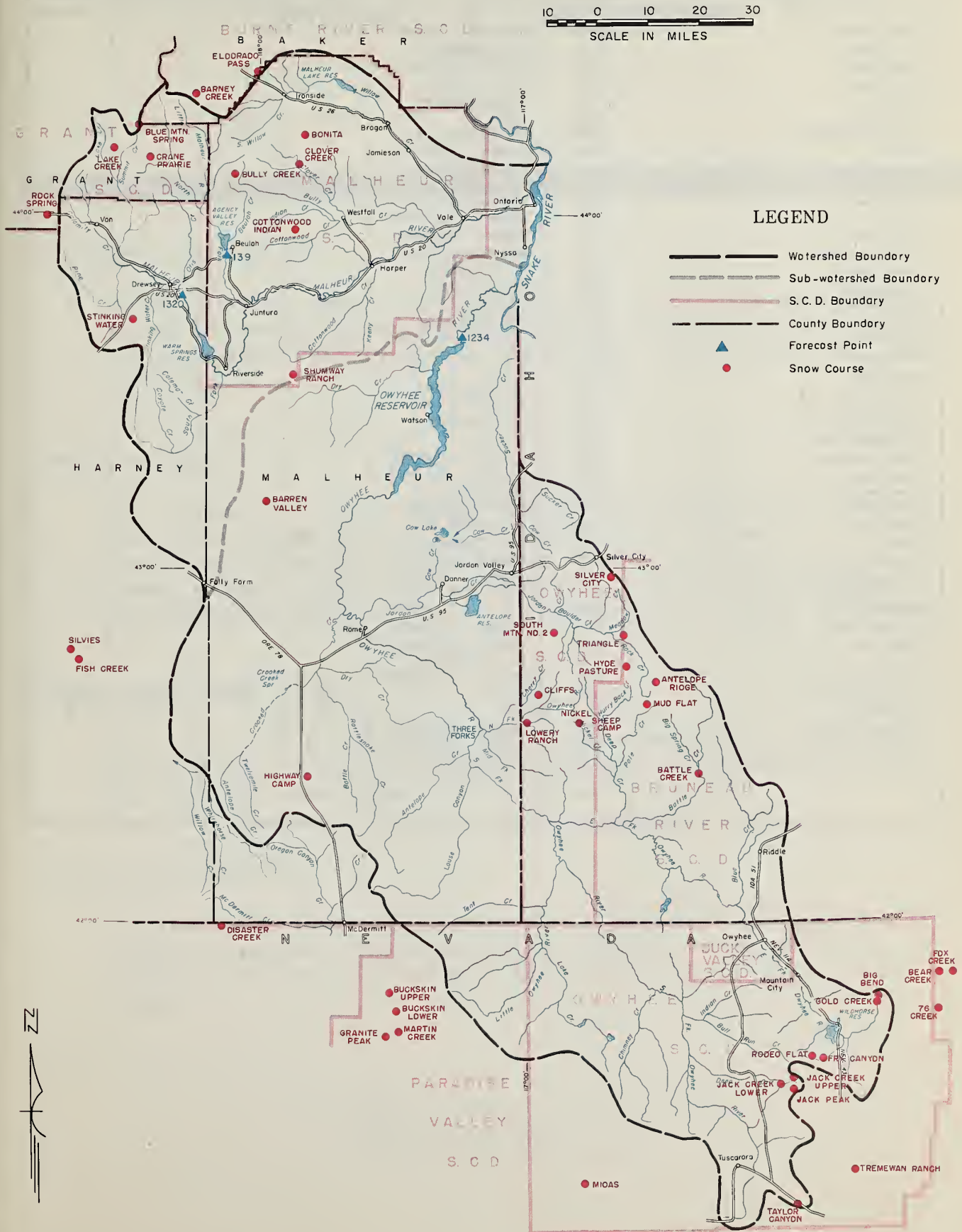
## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Agency Valley	60.0	18.0	20.5	29.9
Antelope	36.5	No	report	
Owyhee	715.0	445.5	453.7	419.0
Warm Springs	191.0	86.0	99.6	63.8



<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled. <sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> From USBR records of inflow

# OWYHEE, MALHEUR WATERSHEDS



## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>d</sup>	
Antelope Ridge	5500	Report delayed					
Barney Creek	5950	Not scheduled					
Barren Valley	4200	Report delayed					
Battle Creek <sup>f</sup>	5700	Not scheduled					
Bear Creek	7800	Report delayed					
Big Bend	6700	1/2	25	5.4	2.5	- -	0
Blue Mountain Springs	5900	12/24	33	7.2	3.5	6.3	15
Bonita	4600	Report delayed					
Buckskin, Lower	6700	Not scheduled					
Buckskin, Upper	7200	Not scheduled					
Bully Creek <sup>f</sup>	5300	Not scheduled					
Cliffs	5200	Report delayed					
Clover Creek	4100	Report delayed					
Cottonwood-Indian <sup>f</sup>	4320	Not scheduled					
Crane Prairie	5375	Not scheduled					
Disaster Peak	6500	Not scheduled					
Eldorado Pass	4600	12/27	3	0.1	0.0	- -	0
Fish Creek	7900	Not scheduled					
Fox Creek	6800	Report delayed					
Fry Canyon	6700	1/2	22	5.7	0.8	- -	0
Gold Creek	6600	1/2	19	4.9	T	- -	0
Granite Peak	7800	Not scheduled					
Highway Camp	4300	Not surveyed					
Hyde Pasture <sup>f</sup>	5800	Not scheduled					
Jack Creek, Lower	6800	1/3	12	3.0	1.6	- -	0
Jack Creek, Upper	7250	Report delayed					
Jack Peak	8420	Report delayed					
Lake Creek	5120	Not scheduled					
Lowry Ranch	4800	Report delayed					
Martin Creek	7200	Not scheduled					
Midas	5700	Not scheduled					
Mud Flat	5500	Report delayed					
Nickel Sheep Camp <sup>f</sup>	5450	Report delayed					
Rock Springs	5100	12/27	10	1.6	0.2	2.5	14
Rodeo Flat	6800	1/2	22	6.6	1.3	- -	0
Shumway Ranch	4400	Report delayed					
Silver City	6400	Report delayed					
Silvies	6900	Not scheduled					
South Mountain No. 2	6340	Report delayed					
Stinking Water	4800	12/27	6	1.5	0.0	1.9	10
Taylor Canyon	6200	1/3	8	1.4	T	- -	0
Tremewan Ranch	5700	Report delayed					
Triangle	5150	Report delayed					
76 Creek	7100	Not scheduled					

# WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

A satisfactory water supply is indicated for irrigated lands of Northeastern Oregon according to an analysis of early-winter snow surveys, soil-moisture conditions, and reservoired water supplies.

## SNOW-COVER

The mountain snow-pack in this area averages 177 percent of last year and 128 percent of the January 1 normal. Even the snow courses at lower elevations have a relatively good snow-pack. Usually about 40 percent of the total winter's snow is accumulated by this time. This year there is about 55 percent.

## SOIL-MOISTURE

Moisture in the soil mantle of these watersheds is important in its effect upon streamflow. Penetration of moisture into soils in the snow zone is exceptionally good.

## RESERVOIR STORAGE

Stored water is about 75 percent of last year's amount but is above average in Wallowa Lake. Present storage in Unity Reservoir is below average. See details in table on inside page.

Report prepared by

W T Frost and Manes Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Alder Slope Baker Valley Big Creek Clover Creek Cave Durkee Eagle Valley Elgin Enterprise - Joseph Hereford - Bridgeport Imnaha River LaGrande - Island City Lostine - Wallowa North Powder River - Wolf Creek Pine Valley Powder River - Elk Creek Summerville Sumpter Valley Union - Hat Lake Unity	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

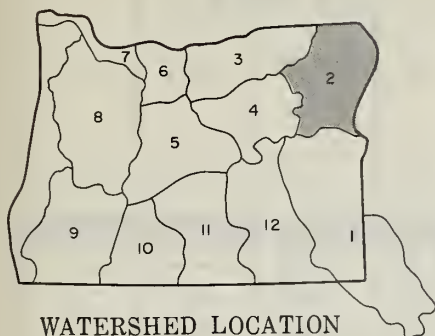
## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
1815	Bear near Wallowa	d	April-Sept.	69	
143	Burnt near Hereford <sup>e</sup>	d	April-Sept.	42	
185	Catherine near Union	d	April-Sept.	71	
1816	Grande Ronde at LaGrande	d	April-Sept.	177	
1814	Hurricane near Joseph	d	April-Sept.	45	
172	Imnaha at Imnaha	d	April-Sept.	303	
1810	Lostine near Lostine	d	April-Sept.	124	
152	Powder near Baker	d	April-Sept. April-July	63 62	
1822	Wallowa East Fork near Joseph <sup>e</sup>	d	April-Sept. April-July	11.3 9.2	

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-52, 15 year period. <sup>c</sup> Number of years in 1938-52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected for natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

# BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



WATERSHED LOCATION

10 0 10 20 30  
SCALE IN MILES



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Unity	25.2	5.4*	6.2	7.4
Wallowa Lake	40.9	24.1	33.0	19.2

\* Nov. 30, 1957

## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S.C.D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course

# Burnt, Powder, Pine, Grande Ronde, Imnaha Watersheds

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Aneroid Lake No.1	7480	Not scheduled					
Aneroid Lake No.2	7000	Not scheduled					
Anthony Lake	7125	12/26	46	13.4	13.8	11.3	13
Barney Creek	5950	Not scheduled					
Beaver Reservoir	5340	Report delayed					
Blue Mountain Summit	5098	12/27	19	4.0	1.8	3.9	15
Bourne	5800	Not scheduled					
Camp Carson	5970	Not scheduled					
County Line	4800	12/23	16	3.3	0.6	- -	1
Dooley Mountain	5430	12/27	16	3.5	0.9	3.8	14
Eilertson Meadows	5400	12/28	28	7.8	2.6	4.1	10
Eldorado Pass	4600	12/27	3	.1	0.0	- -	0
Gold Center	5340	Not scheduled					
Goodrich Lake	6775	Not scheduled					
Lucky Strike	5050	Not scheduled					
Meacham	4300	12/26	20	4.9	0.6	- -	0
Moss Springs	5850	12/27	48	13.5	12.1	9.9	13
Schneider Meadows	5400	Not scheduled					
Schoolmarm	4775	12/23	16	4.1	0.7	- -	2
Summit Springs	6000	Not scheduled					
Taylor Green	5740	Not scheduled					
Tipton	5100	12/31	31	6.3	1.8	- -	0
Tollgate	5070	12/26	47	13.1	6.9	- -	0

# WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Water supply outlook for Umatilla, Morrow, and Gilliam Counties is satisfactory. Analysis of early-winter snow surveys, soil-moisture conditions, and reservoired water supplies indicates the situation is more favorable than at this date last year.

## SNOW-COVER

Snow surveys from three snow courses indicate nearly three times the water content of last year at this date. The snow is well distributed, even at fairly low elevations.

## SOIL-MOISTURE

It is notable that the snow-pack lies on well wetted watershed soils. Moisture penetration has been measured down to three feet in many places.

## RESERVOIR STORAGE

Both McKay and Cold Springs Reservoirs now hold more water than at this date last year. However, only Cold Springs is up to its average storage figure. McKay currently holds about 66 percent of its average figure.

## STREAMFLOW

\*Discharge of Umatilla River since October 1st has been close to normal but October alone was more than twice normal.

\*Preliminary data from U. S. Geological Survey, Portland, Oregon

Report prepared by

W T Frost and Mones Borton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Birch Creek Butter Creek Dry Creek Dugger Creek Johnson Creek McKay Creek Mill Cr. Mud Creek Pine Creek Rhea Creek Umatilla River (Cold Springs Res.) Umatilla River, Main Umatilla River (McKay Res.) Walla Walla River, Little Walla Walla River, Main Walla Walla River, North Fork Walla Walla River, South Fork Willow Creek	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
2213	McKay near Pilot Rock	d	April-Sept. April-July	28 28	
2236	Umatilla near Gibbon	d	April-Sept.	87	
223	Umatilla at Pendleton	d	April-Sept. April-July	167 155	
214	Walla Walla, South Fork near Milton	d	April-Sept. April-July	71 58	

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Arbuckle Mountain	5400	Not scheduled					
Emigrant Springs	3925	12/26	13	4.0	T	- -	0
Lucky Strike	5050	Not scheduled					
Meacham	4300	12/26	20	4.9	0.6	- -	0
Tollgate	5070	12/26	47	13.1	6.9	- -	0

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

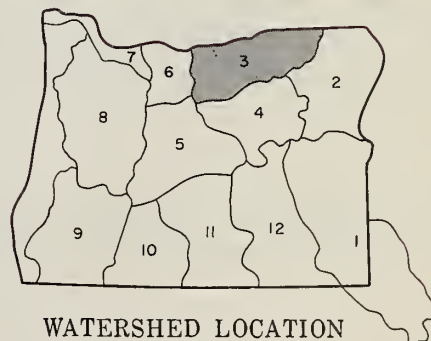
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

# UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS



## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- S.C.D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Cold Springs	50.0	22.0	15.1	21.1
Mc Kay	74.0	18.1	15.9	27.6



# WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

The 1958 outlook for water supplies in the Upper John Day watershed is satisfactory as indicated by an analysis of early-winter snow surveys and soil-moisture data. It is important to realize that about 40 percent of the winter's snow has usually accumulated by January 1st. This is the case this year.

## SNOW-COVER

A synopsis of seven snow surveys in this watershed indicates present water content of snow is about 160 percent of last year at this date and 112 percent of the average. The Olive Lake snow course has 10 inches of water compared with 7.1 inches last year and an average of 7.4 inches.

## SOIL-MOISTURE

Moisture penetration in the soil mantle on the upper watersheds is good in the vicinity of Ukiah and Starr Ridge, fair in the Blue Mountain Summit area and in the Ochoco Mountains.

## STREAMFLOW

\*Flow of the John Day River was greatly above average in October, a little below in November, and about normal in December.

- - -

\*Preliminary data from U. S. Geological Survey, Portland, Oregon

Report prepared by

W T Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Beech Creek Beech Creek-Fox-Long Creek Bridge-Mountain Creeks Comas Creek Cherry Creek Indion-Pine Creeks John Doy River, Moin Fork John Doy River, Mid. Fork John Doy River, North Fork John Doy River, South Fork Monument-Kimberly Strawberry Creek	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
2415	John Day at Prairie City	d	April-Sept. April-July	50 45	
2433	John Day, Mid. Fork at Ritter	d	April-Sept.	122	
2432	John Day, North Fork near Dale	d	April-Sept.	248	
2434	Strawberry near Proirie City	d	April-Sept.	8.3	

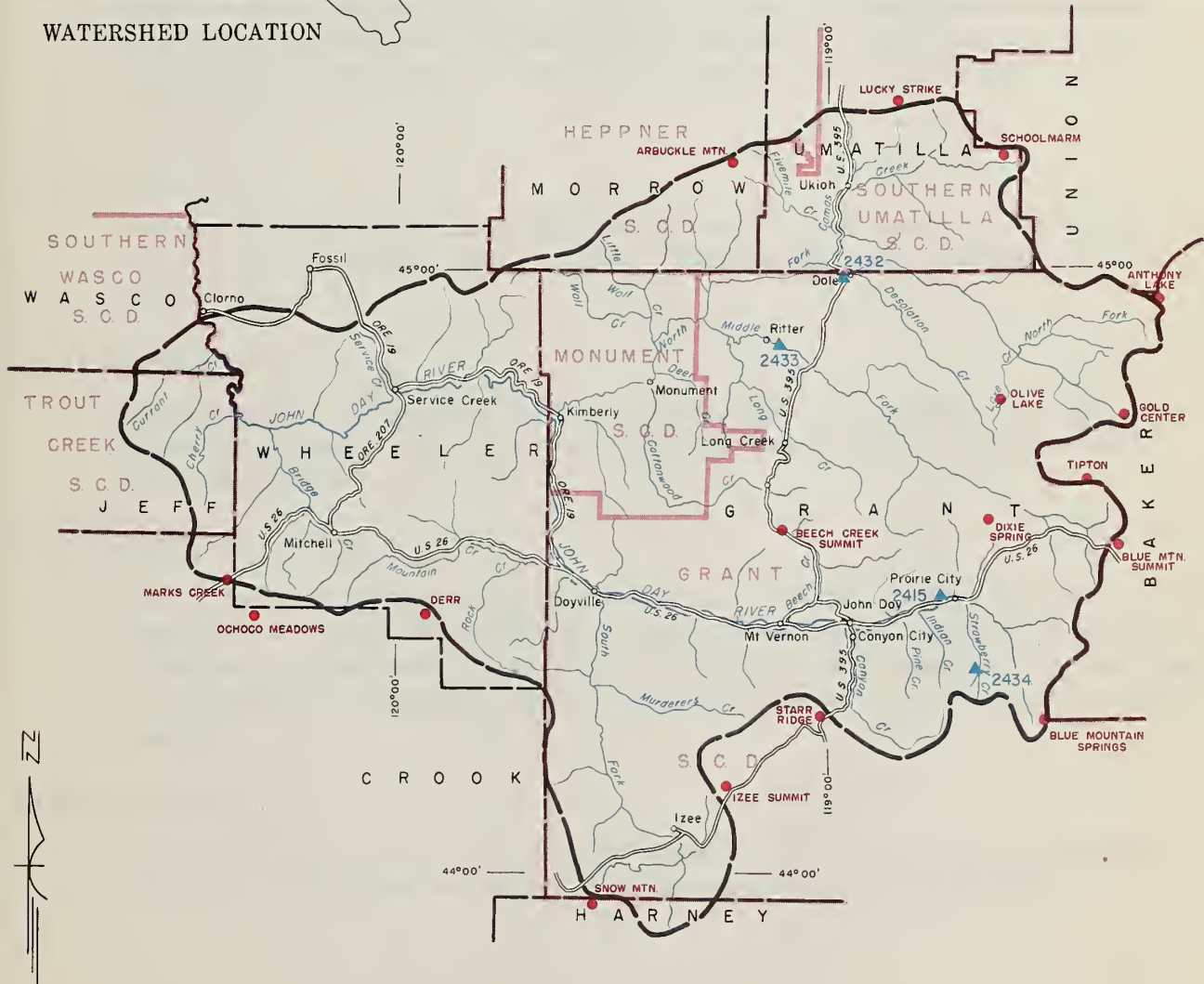
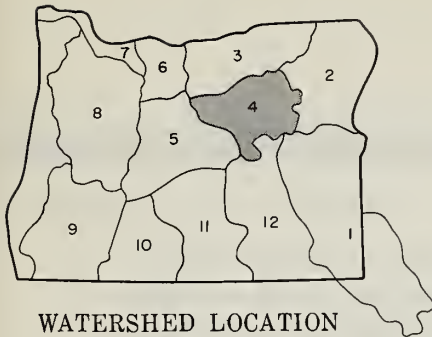
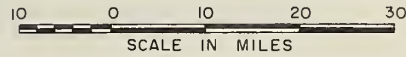
## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Anthony Loke	7125	12/26	46	13.4	13.8	11.3	13
Arbuckle Mountoin	5400	Not scheduled					
Beech Creek Summit	4800	12/26	5	1.3	- -	1.6	10
Blue Mountain Springs	5900	12/24	33	7.2	3.5	6.3	15
Blue Mountain Summit	5098	12/27	19	4.0	1.8	3.9	15
Derr	5670	Not scheduled					
Dixie Springs	6650	Not scheduled					
Gold Center	5340	Not scheduled					
Izee Summit	5293	12/23	10	2.4	- -	3.2	10
Lucky Strike	5050	Not scheduled					
Morks Creek	4540	12/26	6	1.2	0.0	- -	0
Ochoco Meadows	5200	Not scheduled					
Olive Loke	6000	12/31	42	10.0	7.1	7.4	15
Schoolmorm	4775	12/23	16	4.1	0.7	- -	2
Snow Mountain	6300	Not scheduled					
Storr Ridge	5156	12/23	8	1.8	- -	2.1	10
Tipton	5100	12/31	31	6.3	1.8	- -	0

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

# UPPER JOHN DAY WATERSHEDS



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course



# WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

*as of*

January 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Satisfactory water supplies in 1958 for both Deschutes and Crooked River lands seem indicated by an analysis of early-winter snow surveys, soil-moisture measurements, and stored water supplies. Concern for water supplies in Crook County is always greater than in other portions of this area. However, at this early date, the outlook is satisfactory.

## SNOW-COVER

Snow surveys at the end of December show a water content nearly double that of a year ago and just slightly above average. Snow on the lower elevations is not yet up to normal.

## SOIL-MOISTURE

Measurements of soil-moisture in the upper portions of the watersheds indicate the present snow-cover is lying on a moderately wetted soil mantle. This is favorable to later streamflow.

## RESERVOIR STORAGE

None of the four major reservoirs is as full as it was on this date last year but in every case present storage is above average and the outlook is good. Wickiup is filled to 74 percent of capacity and Crane Prairie is at 84 percent of capacity. Ochoco Reservoir on Crooked River watershed is above normal in storage but is only about 41 percent of capacity.

## STREAMFLOW

Flow of the Deschutes River has held well above normal due to deep ground-water contributions while flow of Crooked River has been below average this fall.

Report prepared by

W. T. Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S. W. Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor," "Fair," "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Arnold I. D. Bear Creek Beaver Creek Camp Creek Central Oregon I. D. Crooked River Deschutes River Hay-Trout Creeks Lone Pine I. D. Mill Creek North Unit I. D. Ochoco Creek Ochoco I. D. Sisters I. D. Snow Creek I. D. Squaw Creek I. D. Swalley Ditch Tumalo Project Walker Basin I. D.	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

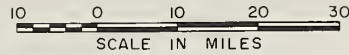
## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
3220A	Crane Prairie Reservoir net inflow	d	April - Sept.	121	
323	Crescent at Crescent Lake <sup>e</sup>	d	April - Sept.	21	
342	Crooked near Post	d	April - Sept.	124 <sup>g</sup>	
317	Deschutes at Benham Falls <sup>e</sup>	d	April - Sept.	511	
		d	April - July	346	
3225	Deschutes below Snow Creek	d	April- Sept.	60	
314	Deschutes, Little near Lapine <sup>e</sup>	d	April - Sept.	90	
		d	April - July	79	
3421	Ochoco Reservoir net inflow	d	April - Sept.	28	
3212	Odell near Crescent	d	April- Sept.	29	
335	Squaw near Sisters	d	April - Sept.	49	
338A	Tumalo near Bend <sup>e</sup>	d	April- Sept.	48	

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

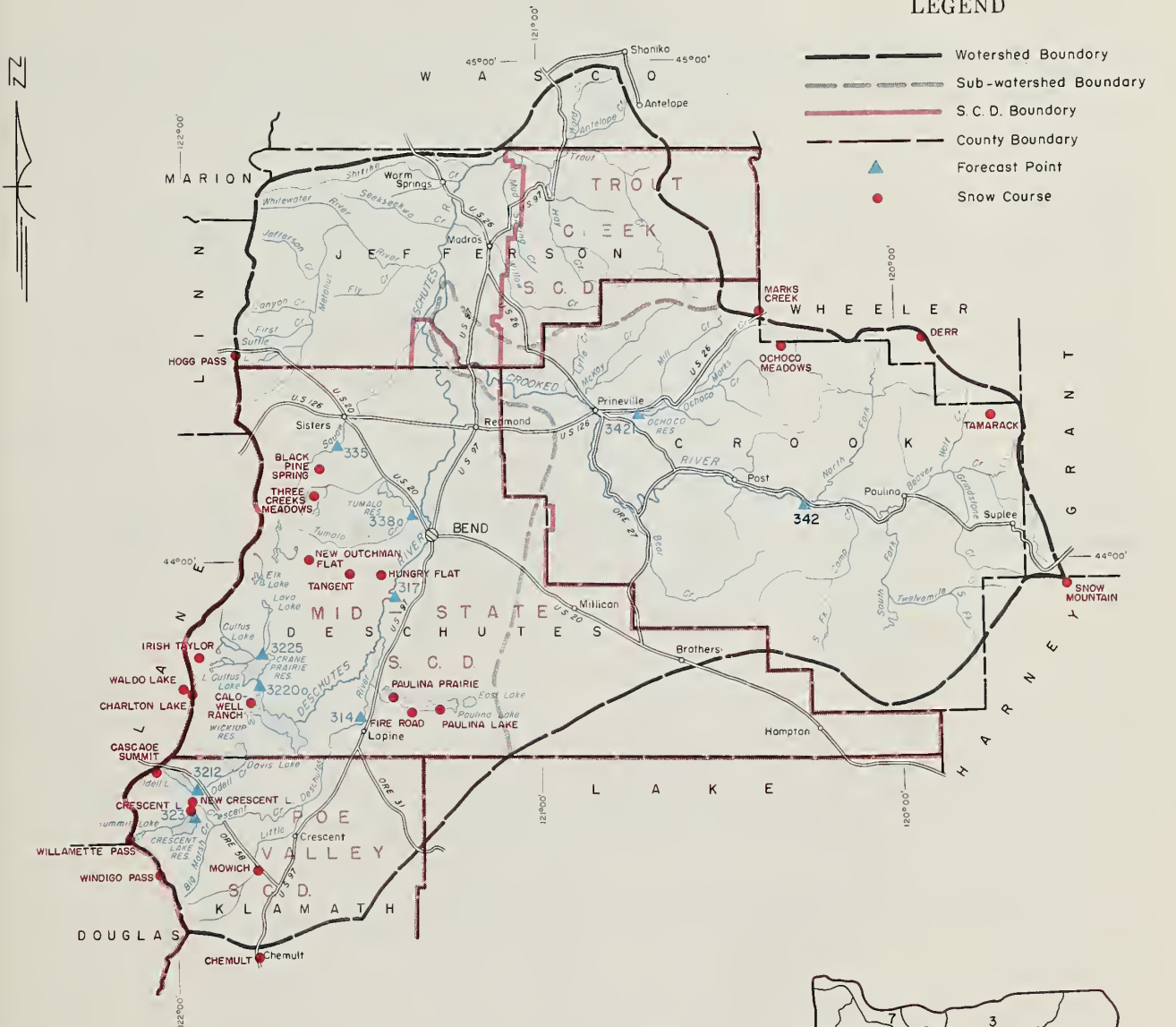
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1938-39 excepted.

# UPPER DESCHUTES, CROOKED WATERSHEDS



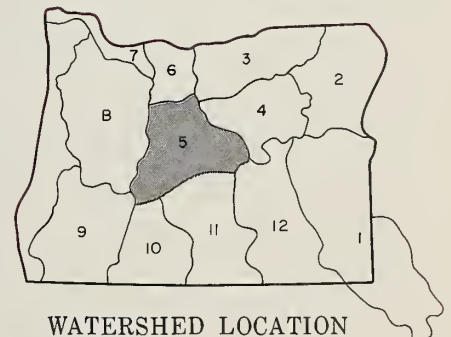
## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Crane Prairie	55.3	46.2	50.1	27.6
Crescent Lake	68.0	43.7	61.2	38.5
Ochoco	46.0	18.7	24.4	16.4
Wickiup	200.0	147.5	184.1	75.5



# Upper Deschutes, Crooked Watersheds

## SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD <sup>c</sup>
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL <sup>d</sup>	
Block Pine Spring	4600	Not scheduled					
Caldwell Ranch	4400	Not scheduled					
Cascade Summit	4880	12/23	48	9.9	6.8	- -	4
Charlton Lake	5750	Not scheduled					
Chemult	4760	12/27	19	4.4	0.6	4.4	14
Crescent Lake	4760	Not scheduled					
Derr	5670	Not scheduled					
Fire Road	5050	Not scheduled					
Hogg Pass	4755	12/23	82	19.4	10.6	18.0	11
Hungry Flat	4400	Not scheduled					
Irish-Taylor	5500	Not scheduled					
Marks Creek	4540	12/26	6	1.2	0.0	- -	0
Mowich	4700	Not scheduled					
New Crescent Lake	4800	Not scheduled					
New Dutchman Flat	6400	Not scheduled					
Ochaco Meadows	5200	Not scheduled					
Paulina Lake	6330	Not scheduled					
Paulina Prairie	4285	Not scheduled					
Snow Mountain	6300	Not scheduled					
Tamarack	4800	Not scheduled					
Tangent	5400	Not scheduled					
Three Creeks Meadows	5600	Not scheduled					
Walda Lake	5500	Not scheduled					
Willamette Pass	5600	Not scheduled					
Windiga Pass	5800	Not scheduled					

# WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS OREGON

*as of*  
January 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Satisfactory water supplies for the Hood River Valley and Wasco County lands in 1958 are indicated by an analysis of early-winter snow surveys, current streamflow data, soil-moisture measurements, and precipitation records.

Small streams heading in watersheds of moderate or low elevations will need heavier than normal snow-cover to assure satisfactory water supplies.

## SNOW-COVER

Present snow-cover, as measured at Phlox Point and Still Creek snow courses on Mt. Hood and near Clearlake on the Wapinitia Highway, is about two and one-half times greater than last year and 125 percent of average.

Low elevation snow is somewhat less than average for this early-winter date.

## STREAMFLOW

Flow of all streams in this area has been below normal most of the time until December. Flow\* of the Hood River in December was 123 percent normal with the stream year to-date (October through December) now up to 97 percent average.

The relatively low base flow\* of streams in this area will reduce future streamflow unless above normal contributions of rain and snow continue.

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\*Base flow and advance data by U. S. Geological Survey, Portland, Oregon

Report prepared by

W T Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Aldridge Ditch Badger Creek Dee I. D. East Fork I. D. Farmers I. D. Glacier I. D. Hood River Juniper Flat Middle Fork I. D. Mile Creek Mill Creek Mount Hood I. D. Rock-Gate-Threemile Creeks Tygh Creek White River	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
437	Hood near Hood River <sup>e</sup>	d	April-Sept.	306	
		d	April-July	260	
438	Hood, West Fork near Dee	d	April-Sept.	147	
		d	April-July	127	
3613	White below Tygh Valley	d	April-Sept.	152	
		d	April-July	135	

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Brooks Meadows	4300	Not scheduled					
Clear Lake	3500	12/30	19	4.5	- -	- -	0
Greenpoint Reservoir	3400	Not scheduled					
Phlox Point	5600	12/26	100	30.7	12.8	23.0	13
Red Hill	4400	Not scheduled					
Still Creek	3700	12/26	36	8.5	2.0	8.4	12
Tilly Jane	6000	Not scheduled					

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.  
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

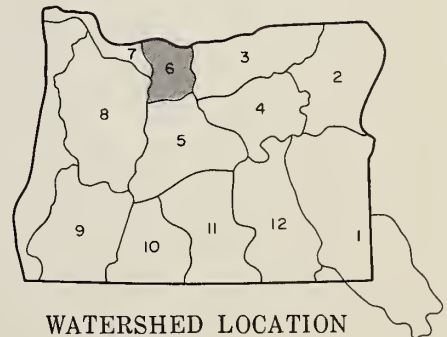
# HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

10 0 10 20  
SCALE IN MILES



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course





# WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

*as of*

JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

At this early-winter date it is difficult to make a firm analysis of expected spring and summer flow of the Columbia River near The Dalles, but available data point toward a flow slightly above normal.

## SNOW-COVER

Snow pack in the southern half of the U. S. portion of the watershed is currently well above normal while the northern half is near average or normal. No details on Canadian snow are available at this date but snow there is probably near normal.

## SOIL-MOISTURE

Soil-moisture is below normal generally. However, some areas of this large watershed have more normal soil moisture conditions.

Information furnished by  
M. W. Nelson  
Soil Conservation Service  
Boise, Idaho

Report prepared by

W T Frost and Mones Borton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

## STREAMFLOW

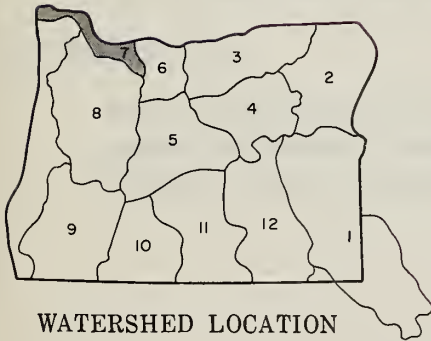
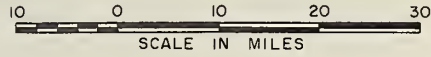
\*Flow of the Columbia as measured near The Dalles has been below normal so far this water year as shown below:

October	94 percent	adjusted	for	storage
November	80 percent	"	"	"
December	81 percent	"	"	"

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\*Advance data furnished by U.S. Geological Survey, Portland, Oregon.

# LOWER COLUMBIA WATERSHEDS



WATERSHED LOCATION

## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- River Miles



# WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

*as of*

JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

At this early-winter date the outlook for 1958 spring and summer water supplies is satisfactory. This favorable outlook is based upon an analysis of early-winter snow surveys, soil-moisture conditions, reservoir water supplies, and other factors.

## SNOW-COVER

Mountain snow-cover is 121 percent of average and better than three times as wet as last year. Snow is well distributed at both higher and lower elevations.

Hogg Pass Snow Course at the Santiam Highway Summit has 19.4 inches of water in the snow compared with 10.6 inches last year and an average of 18.0 inches at this date.

## SOIL-MOISTURE

The soil mantle in the upper portion of Willamette watersheds is moderately wet under the snow. This will favor a satisfactory streamflow in the summer.

## RESERVOIR STORAGE

Present storage in five large multiple-purpose reservoirs is more than three times that of last year due to recent flood control operations. Extra water stored in these reservoirs is being gradually spilled to return to normal operating levels.

## STREAMFLOW

Flow of Willamette Valley streams was below normal in October and November but surged to 133 percent normal in December on the Middle Fork below North Fork as a result of heavy precipitation.

Report prepared by

W T Frost and Mones Barton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

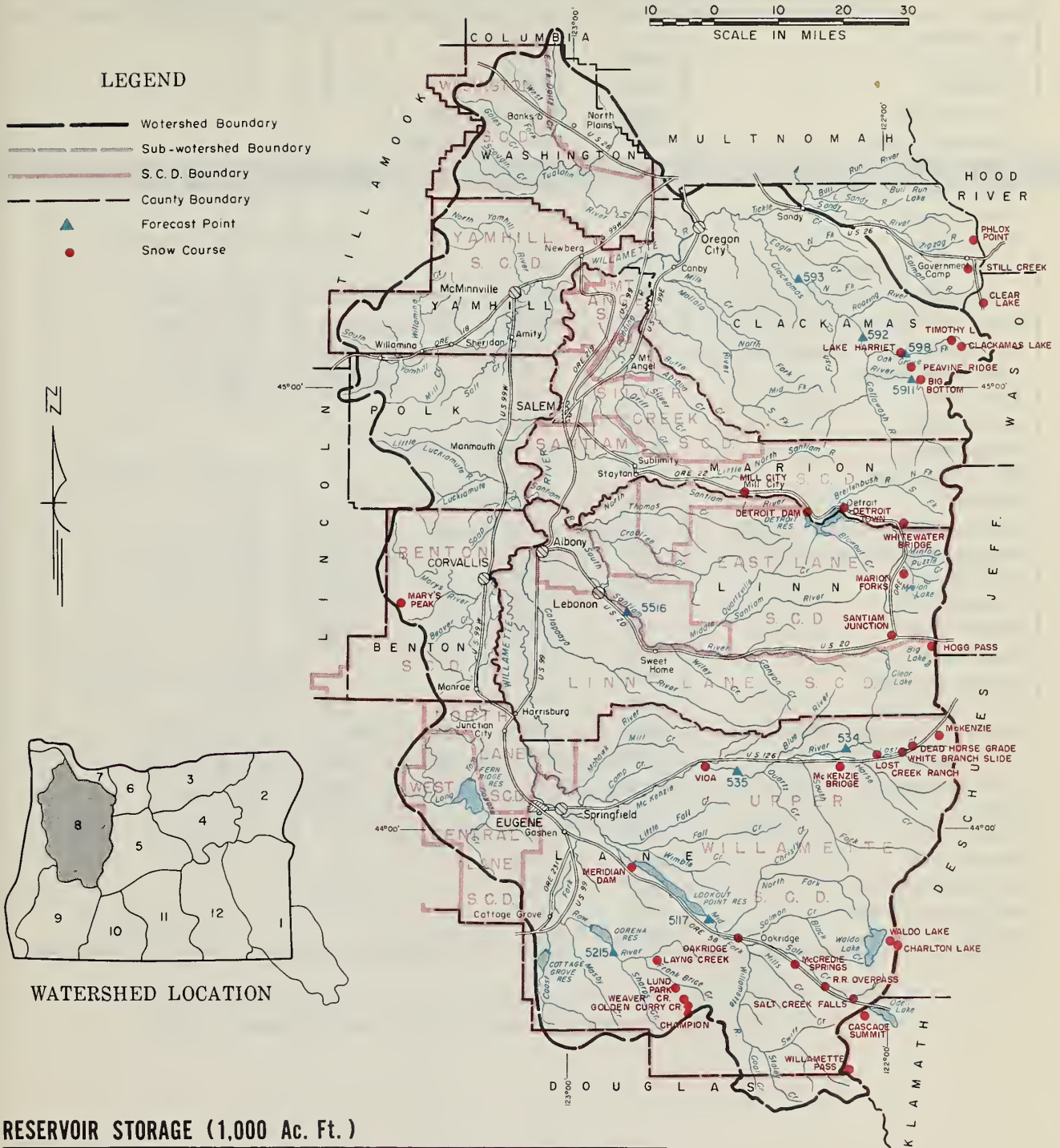
STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Calapooya Clackamas McKenzie Mollalla Santiam, North Santiam, South Willamette, Coast Fork Willamette, Middle Fork	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
5911	Clackamas at Big Bottom	d	April-Sept.	164	
		d	April-July	133	
593	Clackamas near Cazadero	d	April-Sept.	777	
		d	April-July	669	
592	Clackamas above Three Lynx	d	April-Sept.	599	
		d	April-July	507	
534	McKenzie at McKenzie Bridge	d	April-Sept.	565	
		d	April-July	430	
535	McKenzie near Vida	d	April-Sept.	1195	
		d	April-July	978	
598	Oak Grove Fork above Power Intake	d	April-Sept.	186	
		d	April-July	145	
5215	Row near Dorena	d	April-Sept.	101	
		d	April-July	96	
554	Santiam, North at Mehama <sup>c</sup>	d	April-Sept.	842	
		d	April-July	748	
5516	Santiam, South at Waterloo	d	April-Sept.	558	
		d	April-July	525	
5117	Willamette, Mid. Fork below North Fork near Oakridge	d	April-Sept.	798	
		d	April-July	705	
516	Willamette at Salem	d	April-Sept.	4355	
		d	April-July	3863	

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.  
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

# WILLAMETTE WATERSHEDS



**RESERVOIR STORAGE (1,000 Ac. Ft.)**

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Cottage Grove	30.1 *	2.7	0	0.5
Detroit	340.0 *	95.0	5.5	- -
Doreno	70.5 *	31.9	0.3	- -
Fern Ridge	94.2 *	34.3	0.3	4.5
Lookout Point	350.0 *	134.8	72.5	- -

\* Storage space reserved for flood control.

**SNOW**

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL <sup>d</sup>	
Big Bottom	2118	12/30	12	- -	0.0	- -	2
Cascade Summit	4880	12/23	48	9.9	6.8	- -	4
Champion	4500	12/27	52	12.6	0.6	- -	4
Charlton Lake	5750	Not scheduled					
Clackamas Lake	3400	Not scheduled					
Clear Lake	3500	12/30	19	4.5	- -	- -	0
Dead Horse Grade	3800	12/28	33	8.3	1.2	- -	2
Detroit Town	1600	12/23	T	T	0.0	- -	2
Detroit Dam	1580	12/23	0	0.0	0.0	- -	2
Golden Curry Creek	3136	12/27	14	2.2	T	- -	3
Hogg Pass	4755	12/23	82	19.4	10.6	18.0	11
Lake Harriet	3400	12/30	7	- -	0.0	- -	2
Layng Creek	1200	12/27	0	0.0	0.0	- -	3
Lost Creek Ranch	1746	12/28	7	2.0	0.0	- -	1
Lund Park	1740	12/27	0	0.0	0.0	- -	3
Marion Forks	2730	12/23	29	7.7	0.7	5.5	11
Marys Peak	3620	Not scheduled					
McCredie Springs	2120	12/23	T	T	0.0	- -	3
McKenzie	4800	12/28	88	27.2	13.3	- -	2
McKenzie Bridge	1372	12/28	0	0.0	0.0	- -	2
Meridian Dam	750	12/23	0	0.0	0.0	- -	1
Mill City	826	12/23	0	0.0	0.0	- -	2
Oakridge	1310	12/23	0	0.0	0.0	- -	3
Peavine Ridge	3500	12/30	32	9.5	0.0	6.3	15
Phlox Point	5600	12/26	100	30.7	12.8	23.0	13
Railroad Overpass	2750	12/23	T	T	0.0	- -	3
Salt Creek Falls	4000	12/23	21	3.8	0.4	- -	3
Santiam Junction	3990	12/23	46	10.7	2.2	10.3	11
Still Creek	3700	12/26	36	8.5	2.0	8.4	12
Timothy Lake	3295	12/30	33	8.4	0.0	- -	2
Vida	800	12/28	0	0.0	0.0	- -	2
Waldo Lake	5500	Not scheduled					
Weaver Creek	2440	12/27	T	T	0.0	- -	2
White Branch Slide	2800	12/28	13	3.3	T	- -	2
Whitewater Bridge	2175	12/23	11	2.7	T	- -	3
Willamette Pass	5600	Not scheduled					

# WATER SUPPLY OUTLOOK ROGUE, UMPQUA WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Analysis of snow, streamflow, and reservoir data indicates average water supplies can be expected this spring and summer in the Rogue, Umpqua watersheds. That is, if normal meteorological conditions prevail the remainder of the winter.

## SNOW-COVER

Most of the snow courses measured had greater than normal stored-water this month; averaging 124 percent normal. Water content of the snow is about six times greater than last year at this date.

## RESERVOIR STORAGE

Emigrant Gap and Fish Lake Reservoirs are slightly over half full, which is better than usual. Hyatt Prairie is almost half full, which is 188 percent normal. The last available report on Fourmile Lake (October 21) shows it to be about 40 percent of capacity. This equals its average January 1 storage.

## STREAMFLOW

Flow\* of the Rogue at Raygold during December was 125 percent normal. Since October 1 the flow has been 117 percent normal.

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\*Preliminary data from U. S. Geological Survey - Portland, Oregon

Report prepared by

W T Frost and Manes Borton  
U S Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor," "Fair," "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Althouse Creek Applegate River, Big Applegate River, Little Ashland Creek Butte Creek, Little Cow Creek Deer Creek Eagle Point I. D. Elk Creek Emigrant Creek (above Reservoir) Evans Creek Gold Hill I. D. Grants Pass I. D. Grave Creek Illinois River, East Fork Illinois River, West Fork Medford I. D. Neil Creek Red Blanket Creek Rogue River Rogue River Valley I. D. Sucker Creek Table Rock I. D. Talent I. D. Thompson Creek Wagner Creek Williams Creek	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

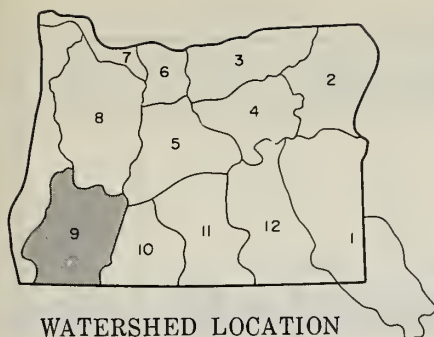
## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
7294	Applegate near Copper	d	April - Sept.	116 <sup>g</sup>	
7420a	Clearwater above Trap Creek <sup>e</sup>	d	April - Sept.	64	
8321	Fourmile Lake net inflow <sup>e</sup>	d	April - Sept.	7.0	
8320	Hyatt Reservoir net inflow <sup>e</sup>	d	April - Sept.	6.0	
712	Illinois River near Kerby <sup>e</sup>	d	April - Sept.	181	
7230	Little Butte, North Fork below Fish Lake <sup>e</sup>	d	April - Sept.	14.9	
722	Rogue above Prospect	d	April - Sept.	316	
		d	April - July	265	
7217	Rogue, Middle Fork near Prospect <sup>e</sup>	d	April - Sept.	74	
		d	April - July	58	
7282	Rogue, South Fork near Prospect <sup>e</sup>	d	April - Sept.	76	
		d	April - July	65	
7277	Rogue below South Fork	d	April - Sept.	680	
		d	April - July	553	
724	Rogue at Raygold near Central Point	d	April - Sept.	905	
		d	April - July	760	
7292	Rogue at Grants Pass	d	April - Sept.	852	
7419	Umpqua, North Fork below Lake Creek <sup>e</sup>	d	April - Sept.	164	

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

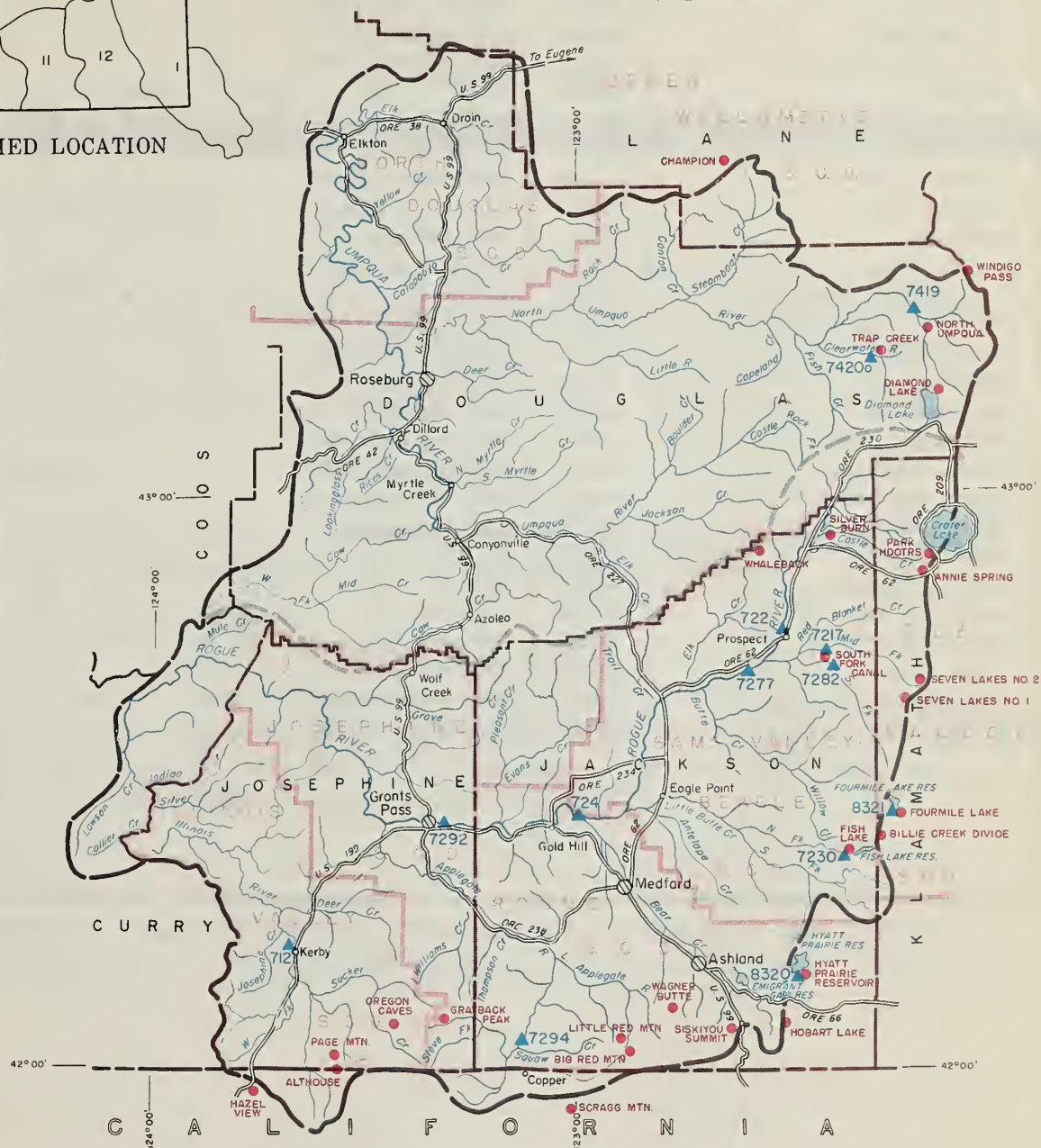
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1938-'39 excepted.

# ROGUE, UMPQUA WATERSHEDS



WATERSHED LOCATION

10 0 10 20 30  
SCALE IN MILES



## LEGEND

- Watershed Boundary
- - - Sub-watershed Boundary
- - - S. C. D. Boundary
- - - County Boundary
- ▲ Forecast Point
- Snow Course

## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Emigrant Gap	8.3	4.6	5.4	4.0
Fish Lake	7.8	4.9	5.8	4.0
Fourmile Lake	16.1	6.2*	12.5	6.2
Hyatt Prairie	16.1	7.7	11.2	4.1
*Oct. 21				

# Rogue, Umpqua Watersheds

## SNOW

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL <sup>d</sup>	
Althouse	4530	Not scheduled					
Annie Spring	6018	Report delayed					
Big Red Mountain	6500	Not scheduled					
Billie Creek Divide	5300	Not scheduled					
Champion	4500	12/27	52	12.6	0.6	- -	3
Diamond Lake	5315	12/27	43	11.4	5.3	8.7	15
Fish Lake	4865	12/26	20	6.2	- -	5.7	12
Fourmile Lake	6000	Not scheduled					
Grayback Peak	6000	Not scheduled					
Hazel View	2500	Not scheduled					
Hobart Lake	5010	Not scheduled					
Hyatt Prairie Reservoir	4900	12/26	17	3.3	- -	3.7	13
Little Red Mountain	6500	Not scheduled					
North Umpqua	4215	Report delayed					
Oregon Caves	4000	Not scheduled					
Page Mountain	4045	Not scheduled					
Park Headquarters	6450	Report delayed					
Scragg Mountain	6200	Not scheduled					
Seven Lakes No. 1	6800	Not scheduled					
Seven Lakes No. 2	6200	Not scheduled					
Silver Burn	3720	12/27	29	7.0	0.0	3.8	15
Siskiyou Summit	4630	12/22	18	2.8	0.0	3.1	13
South Fork Canal	3500	12/27	10	1.9	0.0	1.2	14
Trap Creek	3800	Report delayed					
Wagner Butte	6900	Not scheduled					
Whaleback	5140	Not scheduled					
Windigo Pass	5800	Not scheduled					

*"The Conservation of Water begins with the Snow Survey"*

# WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Water supply conditions in the Klamath watershed have been excellent to date. Snow cover, streamflow, reservoir storage, and precipitation have all been above normal. Barring below normal snowfall the rest of the winter, it appears that Klamath River streams will have average flows this spring and summer.

## SNOW-COVER

Water content of snow in the watershed is slightly above normal but is four times greater than last year at this date.

## RESERVOIR STORAGE

Upper Klamath Lake is already two-thirds full which is somewhat above normal. Gerber and Clear Lake data for January 1 was not available at press time but on December 1 Clear Lake was two-thirds full while Gerber was over half full.

## STREAMFLOW

Inflow\* into Upper Klamath Lake has been 153 percent normal since October 1. During the past month the flow was 152 percent normal.

- - -

\*Preliminary data from California-Oregon Power Company, Medford, Oregon

Report prepared by

W. T. Frost and Mones Borton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Ft. Klamath Valley Lost River (Clear Lake) Lost River (Gerber) Lost River (Willow Reservoir) Sprague River Upper Klamath Lake Williamson River			Forecasts begin in the February 1 report which will reach you about February 9, 1958

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

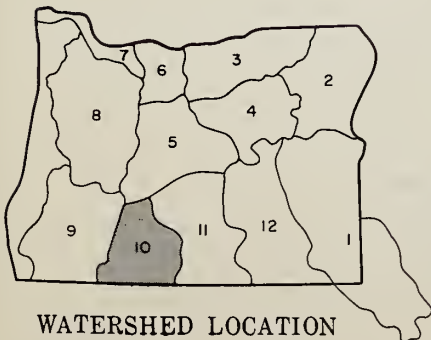
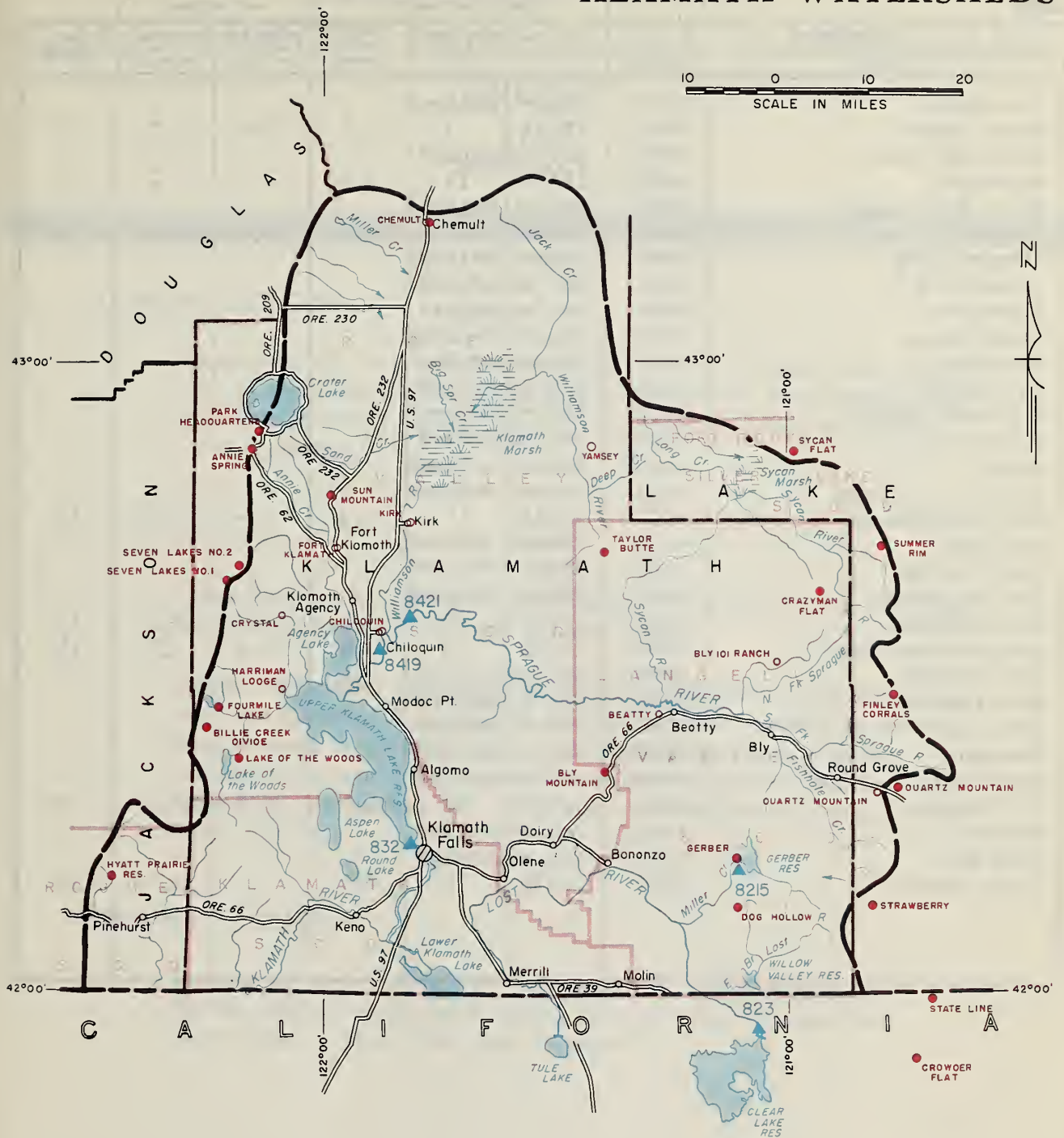
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
823	Clear Lake Reservoir net inflow <sup>g</sup>	d	April - Sept. March - July	49 86	
8215	Gerber Reservoir net inflow <sup>g</sup>	d	April - Sept. March - July	24 42	
8421	Sprague near Chiloquin	d	April - Sept.	253	
832	Upper Klamath Lake net inflow <sup>g</sup>	d	April - Sept. April - July	526 424	
8419	Williamson below Sprague River	d	April - Sept. April - July	406 340	

## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Clear Lake	440.2 <sup>h</sup>	287.7*	300.9	182.0
Gerber	94.0	50.6*	51.5	31.6
Upper Klamath Lake	584.0	387.6	407.8	299.4
*Dec. 1				

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.  
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> From COPCO or U. S. B. R. records of inflow. <sup>h</sup> Flash-boards increase capacity to 513.0

# KLAMATH WATERSHEDS



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S.C.D. Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course
- COPCO Snow Station

# Klamath Watersheds

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF <sup>c</sup> RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Annie Spring	6018	Report delayed					
Beatty (Copco)	4300	12/31	3	.5	0.0	0.2	15
Billie Creek Divide	5300	Not scheduled					
Bly Mountain	5090	12/26	13	3.3	- -	- -	0
Bly IOI Ranch (Copco)	4800	Report delayed					
Chemult	4760	12/27	19	4.4	0.6	4.4	14
Chiloquin ( Copco)	4187	Report delayed					
Crazyman Flat <sup>f</sup>	6100	Not scheduled					
Crowder Flat <sup>f</sup>	5200	Not scheduled					
Crystal (Copco)	4200	Report delayed					
Dog Hollow <sup>f</sup>	4900	Not scheduled					
Finley Corrals <sup>f</sup>	6000	Not scheduled					
Fort Klamath (Copco)	4150	Report delayed					
Fourmile Lake	6000	Not scheduled					
Gerber	4850	Report delayed					
Harriman Lodge (Copco)	4200	Report delayed					
Hyatt Prairie Reservoir	4900	12/26	17	3.3	- -	3.7	13
Kirk (Copco)	4533	Report delayed					
Lake of the Woods	4960	Report delayed					
Park Headquarters	6450	Report delayed					
Quartz Mountain	5320	12/26	9	2.4	0.0	2.9	13
Quartz Mountain (Copco)	5504	12/26	13	3.2	0.0	3.1	14
Seven Lakes No.1	6800	Not scheduled					
Seven Lakes No. 2	6200	Not scheduled					
State Line <sup>f</sup>	5750	Not scheduled					
Strawberry	5600	Not scheduled					
Summer Rim	7200	Not scheduled					
Sun Mountain	5350	12/28	52	14.1	5.8	11.1	13
Sycan Flat <sup>f</sup>	5500	Not scheduled					
Taylor Butte	5100	Not scheduled					
Yamsey ( Copco)	4600	12/31	9	2.1	T	1.4	14

*"The Conservation of Water begins with the Snow Survey"*

# WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

*as of*  
JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Based on what is available it appears that fair to average water supplies will be available this irrigation season in this area. Very limited data is available at this time for use in interpreting the spring and summer run-off outlook.

## SNOW-COVER

Snow cover in the Quartz Mountain area is very near normal. Last year at this time there was no snow at these courses.

Several new aerial snow depth gages were established in the watershed area this summer. These will be read from the air, weather permitting, the last week in January. It is hoped these gages along with the existant snow courses will provide much more extensive data than has been available in the past. These gages will also be read about March 1 and April 1.

## RESERVOIR STORAGE

Drew Reservoir is half full which is normal for this time of year. Cottonwood which can hold slightly more than four thousand acre feet is empty. This is the usual occurrence.

Report prepared by

W T Frost and Manes Barton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Chewaucan River Crooked Creek Deep Creek Dry Creek East Side Goose Lake Guano Lake Honey Creek Lakeview Water Users Association Rock Creek Silver-Buck Creeks Summer Lake Thomas Creek Twentymile Creek Warner Lakes	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

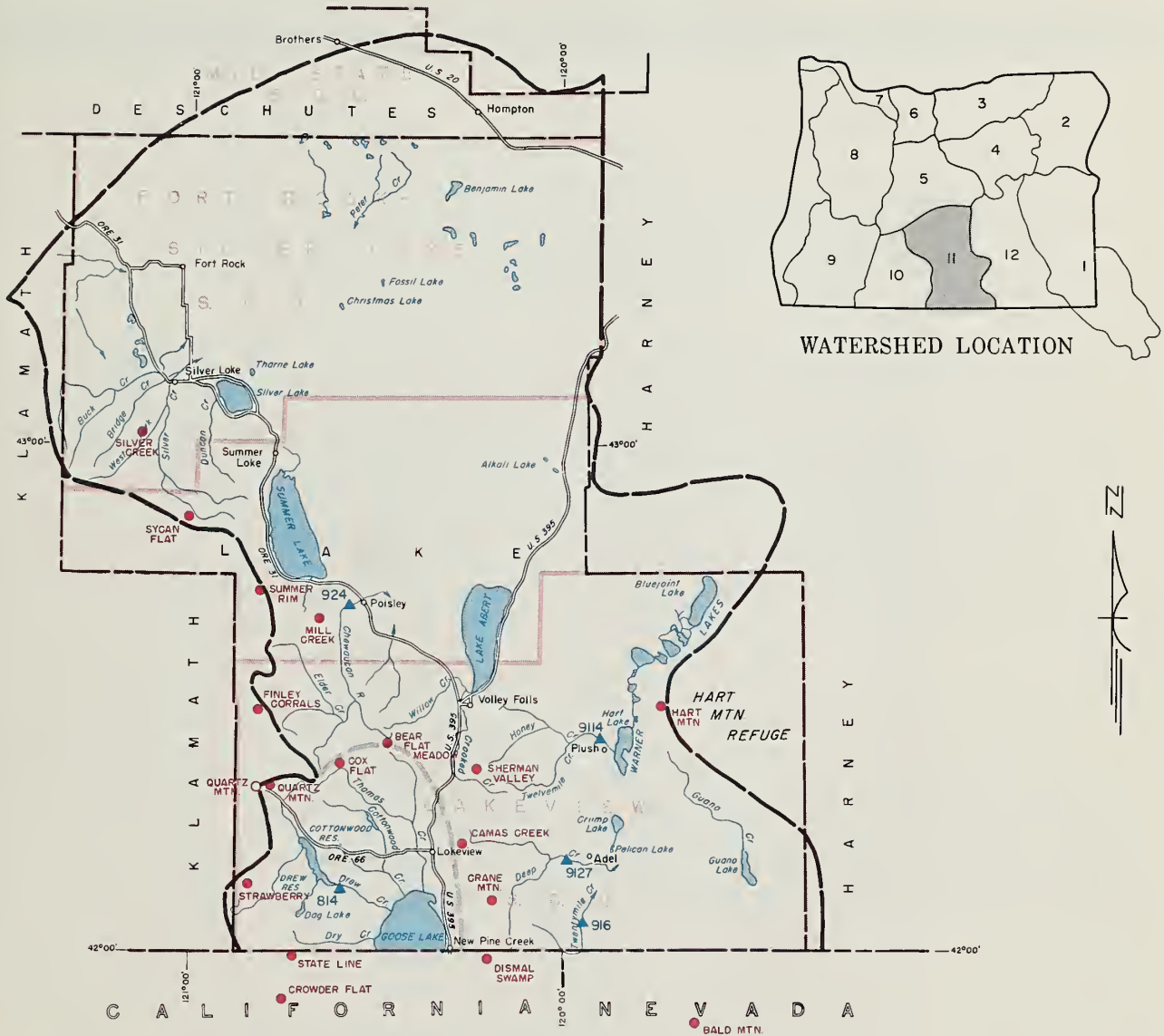
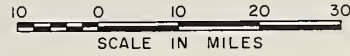
FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
924	Chewaucan near Paisley	d	April — June	73	
9127	Deep above Adel	d	April — June	67	
814	Drew Reservoir net inflow	d	April — July	30 <sup>g</sup>	
		d	March — July	44 <sup>g</sup>	
9114	Honey near Plush	d	April — June	15.6 <sup>h</sup>	
916	Twentymile near Adel	d	April — June	21 <sup>i</sup>	

## SNOW

SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Bald Mauntain	6720	Not scheduled					
Bear Flat Meadow <sup>f</sup>	5900	Not scheduled					
Camas Creek	5720	Not scheduled					
Cox Flat <sup>f</sup>	5750	Not scheduled					
Crane Mauntain <sup>f</sup>	6020	Not scheduled					
Crowder Flat <sup>f</sup>	5200	Not scheduled					
Dismal Swamp <sup>f</sup> (Calif.)	7000	Not scheduled					
Finley Carrals <sup>f</sup>	6000	Not scheduled					
Hart Mauntain <sup>f</sup>	6350	Not scheduled					
Mill Creek	6200	Not scheduled					
Quartz Mauntain (COPCO)	5504	12/26	13	3.2	0.0	3.1	14
Quartz Mauntain	5320	12/26	9	2.4	0.0	2.9	13
Sherman Valley <sup>f</sup>	6600	Not scheduled					
Silver Creek	4900	Report delayed					
State Line <sup>f</sup>	5750	Not scheduled					
Strawberry	5600	Not scheduled					
Summer Rim	7200	Not scheduled					
Sycan Flat <sup>f</sup>	5500	Not scheduled					

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.  
<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated. <sup>g</sup> 1942, '43 and '45 excepted <sup>h</sup> 1942 excepted <sup>i</sup> 1938-'40 excepted.

# LAKE COUNTY, GOOSE LAKE WATERSHEDS



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED ( First of Month )		
		THIS YEAR	LAST YEAR	NORMAL <sup>b</sup>
Cottonwood	4.1	0	0	0
Drew	62.5	32.2	37.5	32.6

## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- S. C. D. Boundary
- County Boundary
- Forecast Point
- Snow Course
- COPCO Snow Station



# WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

*as of*

JANUARY 1, 1958

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

## GENERAL OUTLOOK

Analysis at this early date of snow, precipitation and soil moisture data indicates that Harney Basin streams should have near average flows this spring and summer.

## SNOW COVER

Snow surveys at courses located north of the U. S. Highway #20 reveal that the water content of the snow is 85 percent normal. More than three times as much snow water is on the ground at these courses this year than last year. Snow surveys are not made at this date in the Steen Mountains or at other southern Harney Basin snow courses.

## SOIL MOISTURE

Fall rains, particularly those of October which were over 200 percent normal, have left the soil well wetted in the northern part of the basin. Less data is available for the southern portion of the basin but it appears that the soils are not very wet.

Report prepared by:

W T Frost and Mones Borton  
U. S. Department of Agriculture, Soil Conservation Service  
209 S W Fifth Avenue, Portland, Oregon

# WATER SUPPLY OUTLOOK <sup>a</sup>

Local water supply is expressed as "Poor", "Fair", "Average" or "Excellent".

STREAM or AREA	FLOW PERIOD		REMARKS
	SPRING SEASON	LATE SEASON	
Catlow Valley Cow Creek Donner und Blitzen River Mill- Coffeepot Creeks Rattlesnake Creek Silver Creek Silvies River Soldier- Prather Creek Trout Creek Whitehorse Creek	Forecasts begin in the February 1 report which will reach you about February 9, 1958		

## STREAMFLOW FORECASTS <sup>a</sup> (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS-YEAR	FORECAST PERIOD	NORMAL <sup>b</sup>	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME				
953	Donner und Blitzen near Frenchglen	d	April - Sept.	66	
966	Silvies near Burns	d	April - Sept.	102	
974	Trout near Denio	d	April - Sept.	9.6	

## SNOW

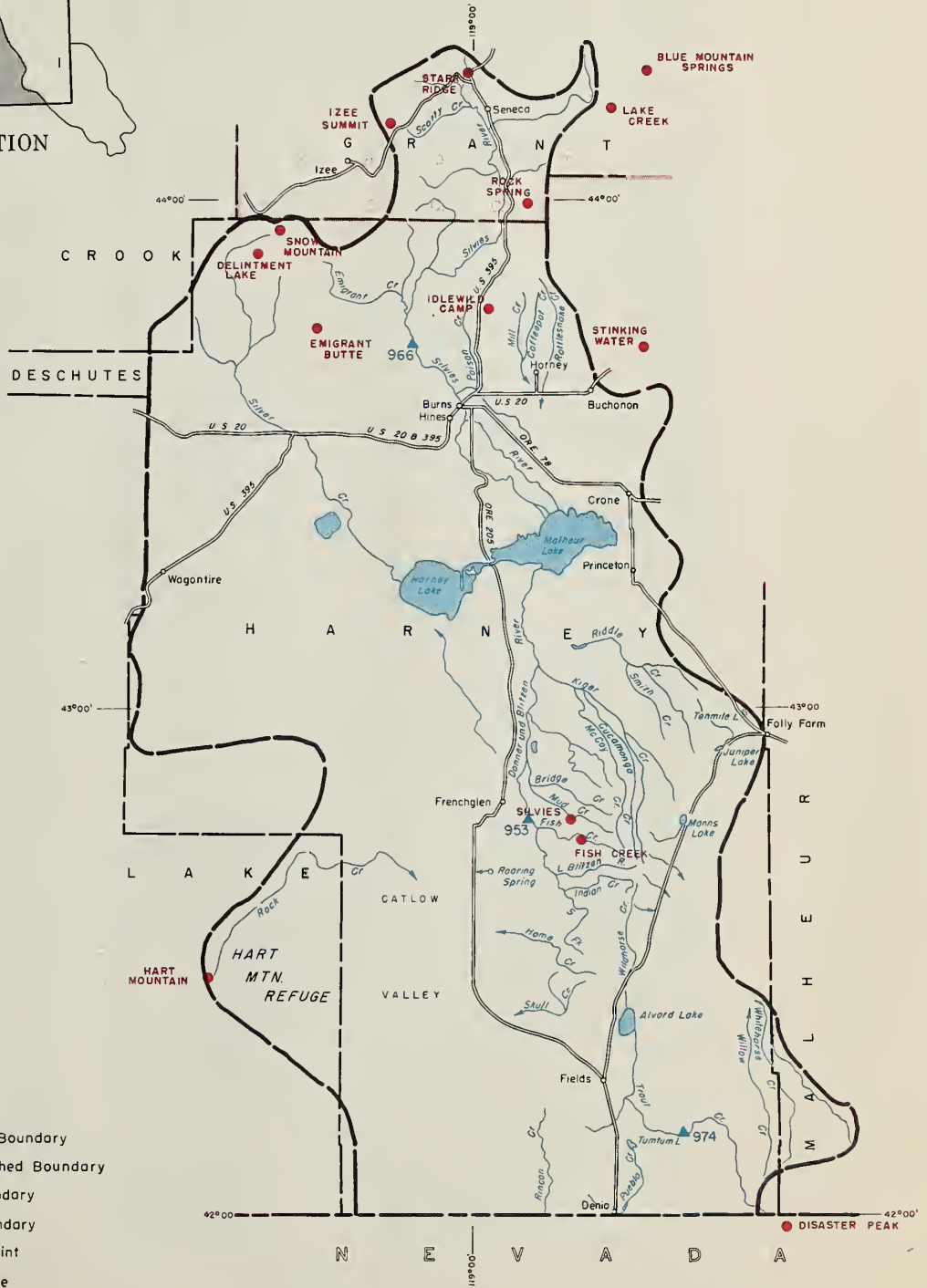
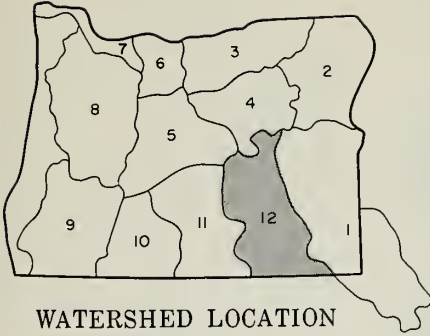
SNOW		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
SNOW COURSE		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)		
NAME	ELEVATION				LAST YEAR	NORMAL <sup>b</sup>	
Blue Mountain Springs	5900	12/24	33	7.2	3.5	6.3	15
Delintment Lake	5600	Not scheduled					
Disaster Peak	6500	Not scheduled					
Emigrant Butte	5000	Not scheduled					
Fish Creek	7900	Not scheduled					
Hart Mountain <sup>f</sup>	6350	Not scheduled					
Idlewild Camp	5200	12/27	11	1.3	0.0	2.5	14
Izee Summit	5293	12/23	10	2.4	- -	3.2	10
Lake Creek	5120	Not scheduled					
Rock Spring	5100	12/27	10	1.6	0.2	2.5	14
Silvies	6900	Not scheduled					
Snow Mountain	6300	Not scheduled					
Starr Ridge	5150	12/23	8	1.8	- -	2.1	10
Stinking Water	4800	12/27	6	1.5	0.0	1.9	10

<sup>a</sup> Assuming normal meteorological conditions. <sup>b</sup> 1938-'52, 15 year period. <sup>c</sup> Number of years in 1938-'52 period. <sup>d</sup> Not scheduled.

<sup>e</sup> Corrected to natural flow. <sup>f</sup> Aerial snow depth gage; water content estimated.

# HARNEY BASIN WATERSHEDS

10 0 10 20 30  
SCALE IN MILES





# MAP and INDEX to OREGON SNOW COURSES



## LEGEND

- Watershed Boundary
- Sub-watershed Boundary
- Snow Course
- COPCO Snow Station

Number	Name	Location	Elev	Number	Name	Location	Elev	Number	Name	Location	Elev
Sec Twp Rge				Sec Twp Rge				Sec Twp Rge			
<b>UMATILLA RIVER (Cont'd.)</b>											
1804	Enigrant Springs	29 1N 35E	3925	<b>WILLAMETTE WATERSHEDS (8)</b>							
1806	Lucky Strike	28 3S 32E	5050	<b>CLACKAMAS RIVER</b>				<b>KLAMATH RIVER (Cont'd.)</b>			
1805	Meacham	24 & 25 1S 35E	4300	21015	Big Bottom	25 6S 7E	2118	220H2	*Crowder Flat	(Cal)	30 47N 11E 5200
1803	Tollgate	32 4N 38E	5070	21013	Clackamas Lake	35 5S 8½E	3400	2106	*Dog Hollow		1 40S 14E 4900
<b>WALLA WALLA RIVER</b>				21012	Clear Lake	29 4S 9E	3500	20G14	*Finley Corral		11 36S 10E 6000
<b>WILLOW CREEK</b>				21016	Lake Harriet	4 6S 7E	2045	22G12	Fourmile Lake		9 36S 5E 6000
1803	Tollgate	32 4N 38E	5070	21D14	Peavine Ridge	14 & 15 6S 7E	3500	21G4	Gerber		12 39S 13E 4850
<b>UPPER JOHN DAY WATERSHEDS (14)</b>				21D8	Phlox Point	6 3S 9E	5600	22G16	Hyatt Prairie Reservoir		15 39S 3E 4900
<b>UPPER JOHN DAY RIVER</b>				21D9	Still Creek	25 3S 8½E	3700	22G15	Lake of the Woods		11 37S 5E 4960
18E1	Anthony Lake	18 7S 37E	7125	21D17	Timothy Lake	26 5S 8E	3295	22G5	Park Headquarters		8 31S 6E 6450
19D2	Arbuckle Mountain	33 4S 29E	5400	<b>SANTIAM RIVER</b>				20G6	Quartz Mountain		2 38S 16E 5320
18E16	Blue Mountain Spring	21 15S 35E	5900	22E1	Detroit (town)	1 10S 5E	1500+	22G10	Seven Lakes No. 1		3 34S 5E 6800
18E11	Blue Mountain Summit	6 12S 36E	5098	22E2	Detroit Dam	7 10S 5E	1580	22G11	Seven Lakes No. 2		26 33S 5E 6200
19E3	Derr	14 13S 21E	4670	21E6	Hogg Pass	24 13S 7½E	4755	20H1	*State Line	(Cal)	21 48N 11E 5750
18E11	Dixie Springs	28 11S 34E	6650	21E4	Marion Fork	28 11S 7E	2730	20G9	Strawberry		4 40S 16E 5600
18E8	Gold Center	21 9S 36E	5340	22E3	Mill City	29 9S 3E	826	20G2	Summer Rim		15 33S 16E 7200
19E9	Izee Summit	28 16S 29E	5293	21E5	Santiam Junction	14 13S 7E	3990	21G2	Sun Mountain		22 32S 7½E 5350
18D6	Lucky Strike	28 3S 32E	5050	21E3	Whitewater Bridge	28 10S 7E	2175	20G13	*Sycan Flat		25 31S 14E 5500
20E1	Marks Creek	25 12S 19E	4540	<b>McKENZIE RIVER</b>				21G3	Taylor Butte		16 33S 11E 5100
20E2	Ochoco Meadows	21 13S 20E	5200	21E8	Dead Horse Grade	13 16S 7E	3800	<b>THE CALIFORNIA OREGON POWER COMPANY'S SNOW STATIONS</b>			
18E7	Olive Lake	14 9S 33½E	6000	22E4	Lost Creek Ranch	24 16S 6E	1746	I	Beatty (COPCO)		22 36S 12E 4300
18D7	Schoolmarm	28 4S 34E	4775	21E7	McKenzie	35 15S 7½E	4800	10	Bly 1D1 Ranch (COPCO)		22 35S 14E 4800
19F1	Snow Mountain	1 19S 26E	6300	22E5	McKenzie Bridge	13 16S 5E	1372	3	Chiloquin (COPCO)		34 34S 7E 4187
19E7	Starr Ridge	20 15S 31E	5150	22E6	Vida	28 16S 2E	800	4	Crystal (COPCO)		26 34S 6E 4200
18R9	Tipton	34 10S 35½E	5100	21E9	White Branch Slide	15 16S 7E	2800	5	Fort Klamath (COPCO)		22 33S 7½E 4150
<b>UPPER DESCHUTES, CROOKED WATERSHEDS (5)</b>				<b>MIDDLE FORK WILLAMETTE RIVER</b>				6	Kirk (COPCO)		1 33S 7E 4533
<b>UPPER DESCHUTES RIVER</b>				22F3	Cascade Summit	7 23S 6E	4880	9	Quartz Mountain (COPCO)		33 37S 16E 5504
21E11	Slack Pine Spring	14 16S 9E	4600	21F7	Charlton Lake	23 21S 6E	5750	12	Tamsey (COPCO)		20 31S 11E 4600
21F8	Caldwell Ranch	30 21S 8E	4400	22F6	McCredie Springs	36 21S 4E	2120	<b>LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)</b>			
22F3	Cascade Summit	7 23S 6E	4880	22F8	Meridian Dam	13 19S 1W	750	<b>GOOSE LAKE</b>			
21F7	Charlton Lake	23 21S 6E	5750	22F7	Oakridge	16 21S 3E	1310	20G15	*Bear Flat Meadow		27 36S 19E 5900
21F11	Chemult	21 27S 8E	4760	22F5	Railroad Overpass	27 22S 5E	2750	20G8	Camas Creek		5 39S 21E 5720
21F9	Crescent Lake	11 24S 6E	4760	22F4	Salt Creek Falls	33 22S 6E	4000	20G11	*Cox Flat		16 37S 18E 5750
21F14	Fire Road	36 21S 11E	5050	22F2	Waldo Lake	15 21S 6E	5500	20G16	*Crane Mountain		13 40S 21E 6020
21E6	Hogg Pass	24 13S 7½E	4755	22F14	Willamette Pass	33 24S 5½E	5600	20H2	*Crowder Flat	(Cal)	30 47N 11E 5200
21F4	Hungry Flat	30 18S 11E	4400	<b>COAST FORK WILLAMETTE RIVER</b>				20H3	*Dismal Swamp	(Cal)	31 48N 16E 7000
21F6	Irish-Taylor	25 20S 6E	5500	22F9	Champion	12 23S 1E	4500	20G6	Quartz Mountain		2 38S 16E 5320
21F17	Mowich	29 25S 8E	4700	22F10	Golden Curry Creek	1 23S 1E	3136	20H1	*State Line	(Cal)	21 48N 11E 5750
21F10	New Crescent Lake	11 24S 6E	4800	22F11	Layne Creek R. S.	31 21S 1E	1200	20G9	Strawberry		4 40S 16E 5600
21F13	Paulina Lake	34 21S 12E	6330	22F12	Lund Park	22 22S 1E	1740	<b>ABERT LAKE</b>			
21F15	Paulina Prairie	28 21S 11E	4285	22F11	Weaver Creek	35 22S 1E	2440	20G15	*Bear Flat Meadow		27 36S 19E 5900
21F3	Tanent	28 18S 10E	5400	<b>MARY'S RIVER</b>				20G11	*Cox Flat		16 37S 18E 5750
21E13	Three Creek Meadows	3 17S 9E	5600	23E1	Mary's Peak	21 12S 7W	3620	20G14	*Finley Corral		11 36S 10E 6000
22F2	Waldo Lake	15 21S 6E	5500	<b>ROGUE, UMPQUA WATERSHEDS (9)</b>				20G4	Mill Creek		1 34S 17E 6200
22F14	Willamette Pass	33 24S 5½E	5600	<b>ROGUE RIVER</b>				20G6	Quartz Mountain		2 38S 16E 5320
22F15	Windigo Pass	20 25S 6E	5800	23G4	Althouse	17 41S 7W	4530	20G10	*Sherman Valley		15 37S 21E 6600
<b>CROOKED RIVER</b>				22C6	Annie Spring	19 31S 6E	6018	<b>SUMMER LAKE</b>			
19E3	Derr	14 13S 21E	5670	22G21	Big Red Mountain	31 40S 1W	6500	20G2	Summer Rim		15 33S 16E 7200
20E1	Marks Creek	25 12S 19E	4540	22C13	Billie Creek Divide	30 36S 5E	5300	<b>SILVER LAKE</b>			
20E2	Ochoco Meadows	21 13S 20E	5200	22G14	Fish Lake	3 37S 4E	4865	21F12	Silver Creek	25 & 26 29S 13E	4900
19F1	Snow Mountain	1 19S 26E	6300	22G12	Fourmile Lake	9 36S 5E	6000	20G13	*Sycan Flat	25 31S 14E	5500
19E4	Tanarack	8 15S 25E	4800	23G3	Grayback Peak	9 40S 5W	6000	<b>WARNER LAKE</b>			
<b>HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS (6)</b>				23H1	Hazel View	(Cal)	9 48N 4E 2500	20G8	Camas Creek		5 39S 21E 5720
<b>HOOD RIVER</b>				22G17	Hobart Lake	17 40S 3E	5010	20G16	*Crane Mountain		13 40S 21E 6020
21D6	Brooks Meadows	2 2S 10E	4300	22G16	Hyatt Prairie Reservoir	15 39S 3E	4900	20H3	*Dismal Swamp	(Cal)	31 48N 16E 7000
21D1	Greenpoint Reservoir	28 2W 9E	3400	22G22	Little Red Mountain	25 40S 2W	6500	19G1	*Hart Mountain		1 36S 25E 6350
21D8	Phlox Point	6 3S 9E	5600	23G6	Oregon Gaves	16 40S 6W	4000	20G10	*Sherman Valley		15 37S 21E 6600
21D4	Red Hill	21 1S 9E	4400	23G5	Page Mountain	8 41S 7W	4045	<b>GUANO LAKE</b>			
21D9	Still Creek	25 3S 8½E	3700	22G5	Park Headquarters	8 31S 6E	6450	19H1	Bald Mountain	(Nev)	17 45N 21E 6720
21D7	Tilly Jane	15 2S 9E	6000	22H1	Scragg Mountain	(Cal)	9 47N 10W 6200	19G1	*Hart Mountain		1 36S 25E 6350
<b>MILE CREEKS - MOSIER CREEK</b>				22G10	Seven Lakes No. 1	3 34S 5E	6800	<b>HARNEY BASIN WATERSHEDS (12)</b>			
21D6	Brooks Meadows	2 2S 10E	4300	22G11	Seven Lakes No. 2	26 33S 5E	6200	<b>SILVIES RIVER - SILVER CREEK</b>			
<b>LOWER DESCHUTES RIVER</b>				22G2	Silver Burn	30 30S 4E	3720	19F2	Uelintment Lake		28 19S 26E 5600
21D12	Glear Lake	29 4S 9E	3500	22G20	Siskiyou Summit	17 40S 2E	4630	19F3	Waggon Butte		14 21S 27E 5000
21E6	Hogg Pass	24 13S 7½E	4755	22G9	South Fork Canal	12 33S 3E	3500	18F3	Idlewild Camp		33 20S 31E 5200
<b>LOWER COLUMBIA WATERSHEDS (7)</b>				22G18	Wagner Butte	1 40S 1W	4900	19B9	Izee Summit		26 36S 29E 5293
<b>SANDY RIVER</b>				22G1	Whaleback	3 31S 2E	5140	18F1	Rock Spring		23 18S 32E 5100
21D8	Phlox Point	6 3S 9E	5600	<b>KLAMATH WATERSHEDS (10)</b>				19F1	Snow Mountain		1 19S 26E 6300
21D9	Still Creek	25 3S 8½E	3700	22G6	Annie Spring	19 31S 6E	6018	19E7	Starr Ridge		20 15S 31E 5150
<b>UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)</b>				22G13	Billie Creek Divide	30 36S 5E	5300	18F4	Stinking Water		33 21S 34E 4800
<b>UMATILLA RIVER</b>				21G5	Bly Mountain	15 & 22 37S 11E	5090	<b>DONNER UND BLITZEN RIVER</b>			
19D2	Arbuckle Mountain	33 4S 29E	5400	21G1	Chemur	21 27S 8E	4760	18G2	Fish Creek		4 33S 33E 7900
<b>PINE CREEK</b>				20G12	*Grazyman Flat	9 34S 15E	6100	19G1	*Hart Mountain		1 36S 25E 6350
17D8	Schneider Meadows	35 6S 45E	5400	<b>TROUT AND WHITENORSE CREEKS</b>				18G1	Silvie		35 32S 32½E 6900

Number	Name	Location	Elev	Number	Name	Location	Elev	Number	Name	Location	Elev	Number	Name	Location	Elev		
		Sec Twp Rge				Sec Twp Rge				Sec Twp Rge				Sec Twp Rge			
OWYHEE, MALHEUR WATERSHEDS (11)																	
OWYHEE RIVER				OWYHEE RIVER (Cont'd.)				BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (12)				GRANDE RONDE RIVER					
				16G8	*Nickel Sheep Camp	(Ida)	23 10S 4W 5450					17D1	Aneroid Lake No. 1	16 4S 45E 7480			
				15H6	Rodeo Flat	(Nev)	36 43N 53E 6800					17D2	Aneroid Lake No. 2	16 4S 45E 7000			
				15H3	76 Creek	(Nev)	6 44N 58E 7100	BURNT RIVER					18E1	Anthony Lake	18 7S 37E 7125		
956	Antelope Ridge	(Ida)	32 8S 1W 5900	17F1	Shumway Ranch		29 23S 39E 4400	18E14	Barney Creek	16 14S 36E 5950		18D9	Beaver Reservoir	8 5S 37E 5340			
875	Barren Valley		26 27S 38E 4200	16F3	Silver City	(Ida)	6 5S 3W 6400	18D11	Blue Mountain Summit	6 12S 36E 5098		18D11	Camp Caroon	33 6S 36E 5970			
529	*Battle Creek	(Ida)	10 11S 1E 5700					17E1	Dooley Mountain	32 11S 40E 5430		18D8	Gounty Line	28 4S 34E 4800			
5H1	Bear Creek	(Nev)	31 46N 58E 7800	18G1	Silvies		35 32S 32½E 6900	18E20	Eldorado Pass	20 14S 38E 4600		18D6	Lucky Strike	28 3S 32E 5050			
5H2	Big Bend	(Nev)	30 45N 56E 6700	16G1	South Mountain No. 2	(Ida)	35 7S 5W 6340	18E8	Gold Center	21 9S 36E 5340		18D5	Meacham	24 & 25 1S 35E 4000			
7H1	Buckskin, Lower	(Nev)	25 45N 59E 6700	15H9	Taylor Canyon	(Nev)	35 39N 53E 6200	18E9	Tipton	34 10S 35½E 5100		17D6	Moss Spring	28 3S 41E 5850			
6G2	Buckskin, Upper	(Nev)	11 45N 39E 7200	15H8	Tremewan Ranch	(Nev)	9 39N 55E 5700	POWDER RIVER				18D7	Summit Springs	28 4S 34E 4775			
6G1	Cliffs	(Ida)	18 9S 5W 5200	16G4	Triangle	(Ida)	25 7S 3W 5150					18D10	Summit Springs	9 6S 37E 6000			
6H1	Disaster Peak	(Nev)	8 47N 34E 6500	MALHEUR RIVER								17D7	Taylor Green	3 6S 42E 5740			
6H2	Fish Creek		4 33S 33E 7900					18E1	Anthony Lake	18 7S 37E 7125		18D3	Tollgate	32 4N 38E 5070			
6H3	Fox Creek	(Nev)	33 46S 58E 6800	18E14	Barney Creek		16 14S 36E 5950	18E5	Bourne	33 8S 37E 5800		IMNAHA RIVER					
6H7	Fry Canyon	(Nev)	31 43N 54E 6700	18E16	Blue Mountain Spring		21 14S 35E 5900	17E1	Dooley Mountain	32 11S 40E 5430							
6H5	Gold Creek	(Nev)	31 45N 56E 6600	17E3	Bonita		5 16S 40E 4600	18E3	Eilertson Meadows	18 8S 38E 5400		17D1	Aneroid Lake No. 1	16 4S 45E 7480			
6H4	Granite Peak	(Nev)	22 44N 39E 7800	18E21	*Bully Creek		10 17S 37E 5300	18E6	Gold Center	21 9S 36E 5340		17D2	Aneroid Lake No. 2	16 4S 45E 7000			
6G1	Highway Camp		36 36S 41E 4300	17E2	Glover Creek		36 16S 39E 4100	18E1	Goodrich Lake	4 9S 38E 6775		UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (13)					
6G5	*Hyde Pasture	(Ida)	31 8S 2W 5800	17F2	*Gottonwood-Indian		20 19S 39E 4320	18D10	Summit Springs	9 6S 37E 6000		UMATILLA RIVER					
6H1	Jack Creek, Lower	(Nev)	18 42N 53E 6800	18E19	Grane Prairie		24 16S 34E 5375	17D7	Taylor Green	3 6S 42E 5740							
6H2	Jack Creek, Upper	(Nev)	9 42N 53E 7250	18E20	Eldorado Pass		20 14S 38E 4600	PINE CREEK									
6H4	Jack Peak	(Nev)	28 42N 53E 8420	18E18	Lake Creek		10 16S 33½E 5120					17D8	Schneider Meadows	35 6S 45E 5400	19D2	Arbuckle Mountain	33 4S 29E 5400
6G3	Lovely Ranch	(Ida)	19 10S 5W 4800	18F1	Rock Spring		23 18S 32E 5100	GRANDE RONDE RIVER									
6H3	Martin Creek	(Nev)	18 44N 40E 6700	17F1	Shumway Ranch		29 23S 39E 4400	GRANDE RONDE RIVER									
6H3	Midan	(Nev)	18 39N 46E 7200	18F4	Stinking Water		33 21S 34E 4800	GRANDE RONDE RIVER									
6G7	Mus Flat	(Ida)	34 9S 2W 5500														



The following organizations cooperate in the Oregon Snow Survey work:

STATE

Idaho Cooperative Snow Surveys  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon State Engineer and Corps of State Watermasters  
Oregon State Highway Engineers  
Soil Conservation Districts of Oregon

FEDERAL

Department of Agriculture  
Cooperative Extension Service  
Forest Service  
Soil Conservation Service  
Department of Commerce  
Weather Bureau  
Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Geological Survey  
Indian Service  
National Park Service  
Department of National Defense  
Corps of Army Engineers

PUBLIC UTILITIES

California-Pacific Utilities Company  
Pacific Power and Light Company  
Portland General Electric Company  
The California Oregon Power Company

MUNICIPALITIES

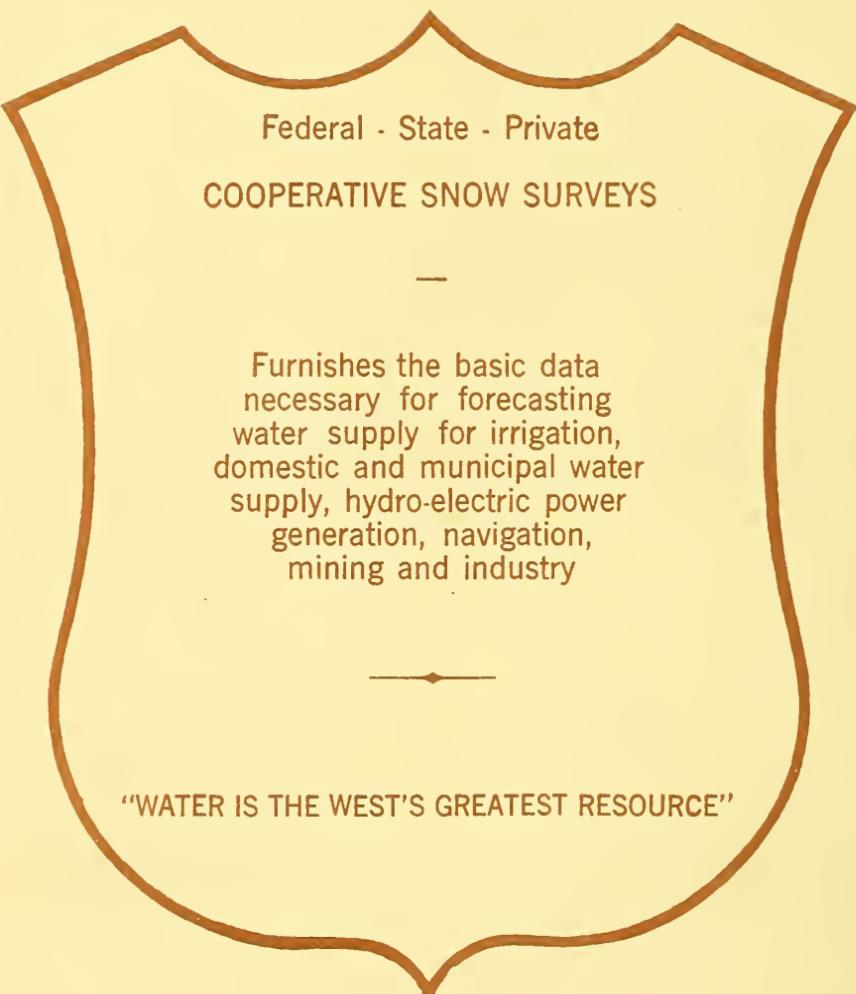
City of Baker  
City of La Grande  
City of The Dalles  
City of Walla Walla

IRRIGATION DISTRICTS

Associated Ditch Companies  
Central Oregon Irrigation District  
Deschutes County Municipal Improvement District  
East Fork Irrigation District  
Grants Pass Irrigation District  
Jordan Valley Irrigation District  
Lakeview Water Users, Incorporated  
Medford Irrigation District  
North Board of Control - Owyhee Project  
North Unit Irrigation District  
Ochoco Irrigation District  
Rogue River Valley Irrigation District  
South Board of Control - Owyhee Project  
Talent Irrigation District  
Vale-Oregon Irrigation District  
Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company  
The Crag Rats, Hood River, Oregon



Federal - State - Private  
COOPERATIVE SNOW SURVEYS

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Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

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"WATER IS THE WEST'S GREATEST RESOURCE"